

2018 HEALTHY SOILS PROGRAM INCENTIVES PROGRAM



Request for Grant Applications

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The 2018 Healthy Soils Program Incentives Program is funded by the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 and the California Climate Investments



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CONTENTS

CONTENTS.....	2
BACKGROUND AND PURPOSE.....	3
FUNDING AND DURATION.....	3
ELIGIBILITY AND EXCLUSIONS	4
ELIGIBILITY.....	4
EXCLUSIONS.....	4
TIMELINE.....	5
WORKSHOPS AND TECHNICAL ASSISTANCE	5
ELIGIBLE AGRICULTURAL MANAGEMENT PRACTICES	5
TECHNICAL SPECIFICATIONS FOR ESTIMATION OF GHG BENEFITS	7
PROGRAM REQUIREMENTS.....	8
APPLICANT ID	9
PROJECT DURATION AND COST SHARING	9
BASELINE DATA.....	9
GHG REDUCTION ESTIMATION	10
GRANT APPLICATION PROCESS	10
HOW TO APPLY	10
REVIEW AND EVALUATION PROCESS	11
REVIEW PROCESS.....	11
EVALUATION CRITERIA	11
ADDITIONAL CONSIDERATIONS	12
ASSISTANCE AND QUESTIONS	12
NOTIFICATION AND FEEDBACK	12
DISQUALIFICATIONS.....	12
AWARD PROCESS	13
PRE-PROJECT CONSULTATION	13
GRANT AGREEMENT	13
PROJECT IMPLEMENTATION.....	13
PROJECT REPORTING REQUIREMENTS	13
PAYMENT PROCESS.....	13
PROJECT VERIFICATION.....	14
POST-PROJECT COMPLETION REQUIREMENTS	15
APPENDIX I: REQUIRED APPLICATION DOCUMENTS	15
APPENDIX II: REFERENCE DOCUMENTS TO ASSIST PREPARATION OF APPLICATION....	17
Document 1: Application Check List	17
Document 2: Preview of Application Questions	18
Document 3: HSP Practices Payment Rates and Implementation Guidelines and Verification Requirements	27
Document 4: Soil Sampling Protocol for Soil Organic Matter Analysis.....	37
Document 5: Non-Overlapping Practices	39
Document 6: Step-by-Step Instructions to Assist in Selecting Species to Be Planted When Implementing Cover Crop, Herbaceous, and Woody Cover Establishment Practices (calflora NRCS)	40
Document 7: 2018 HSP Incentives Program Scoring Criteria	47
Document 8: Step-by-step Instructions for Compost Ineligible Tool.....	49

BACKGROUND AND PURPOSE

The California Department of Agriculture (CDFA), in coordination with the California Natural Resources Agency (CNRA) and California Air Resources Board (CARB), is pleased to announce that funding is available through a competitive grant process for the 2018 Healthy Soils Program (HSP) Incentives Program.

The 2018 HSP Incentives Program is part of the Healthy Soils Program (HSP), which stems from the [California Healthy Soils Initiative](#), a collaboration of state agencies and departments that promotes the development of healthy soils on California's farmlands and ranchlands. The 2018 HSP Incentives Program is funded by [California Drought, Water, Parks, Climate, Coastal Protection and Outdoor Access for All Act of 2018](#) (Chapter 10, Section 80134(a and b)) and the California Climate Investments, authorized by the Budget Act of 2018 ([SB 856](#); Chapter 30, Section 4).

The objectives of the HSP are to build soil organic carbon and reduce atmospheric greenhouse gases (GHGs) by (1) providing financial incentives to California growers and ranchers for agricultural management practices that sequester carbon, reduce atmospheric GHGs and improve soil health which also lead to efficient use of water, (2) funding on-farm demonstration projects that conduct research and/or showcase conservation management practices that mitigate GHG emissions and increase soil health, and (3) creating a platform promoting widespread adoption of conservation management practices throughout the state.

The HSP Incentives Program addresses Objective 1. Objectives 2 and 3 are addressed in the 2018 HSP Demonstration Projects. Request for Applications for both the HSP Incentives Program and the HSP Demonstration Projects are available on the HSP website: <https://www.cdfa.ca.gov/oefi/healthysouls/>.

FUNDING AND DURATION

CDFA was appropriated \$10 million from the California Drought, Water, Parks, Climate, Coastal Protection and Outdoor Access for all Act of 2018; and \$5 million from the California Climate Investments, authorized by the Budget Act of 2018 to fund HSP – Incentives Program and Demonstration Projects. The HSP Incentives Program will provide financial incentives to California growers and ranchers for implementation of agricultural management practices that sequester carbon, reduce atmospheric GHGs, and improve soil health.

- The maximum grant award is \$75,000.
- Grant funds cannot be expended before July 1, 2019 or after March 31, 2022.
- Cost sharing (matching funds or in-kind contributions) during grant duration is not required but may receive additional consideration (See: [Project Duration and Cost Sharing](#)).
- CDFA reserves the right to offer an award different than the amount requested.

The HSP funds may be combined with other funds as match for the same project, such as funds from the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS)

ELIGIBILITY AND EXCLUSIONS

ELIGIBILITY

- California farmers, ranchers and Federal and California Recognized Native American Indian Tribes are eligible to apply.
- Projects must be located on a California agricultural operation. For the purpose of this program, an agricultural operation is defined as row, vineyard, field and tree crops, commercial nurseries, nursery stock production, and livestock and livestock product operations.
- Awards are limited to one per agricultural operation using a unique tax identification number per round of funding.
- Any project, at a minimum, must implement at least one of the eligible agricultural management practices listed under [Eligible Agricultural Management Practices](#), on fields/APNs where it was not implemented previously.
- Projects must result in net GHG benefits (i.e., net positive GHG reductions) from specific eligible agricultural management practices identified in this solicitation for the grant agreement term supported by document(s) of Carbon Sequestration and GHG Estimation Report(s) (See [GHG Reduction Estimation](#)).
- Applicants must provide baseline data on cropping and management histories directly related to fields identified by Assessor's Parcel Numbers (APNs) where eligible agricultural management practices are proposed for implementation to be eligible for funding.
- Applicants must lease, own or otherwise control the Assessor's Parcel Numbers (APNs) where project activities are proposed to occur for the entirety of the project duration. If leasing land, applicants must have documented landowner approval to implement proposed practices(s) from July 1, 2019 through March 31, 2022. If the applicants are leasing property on which practices will be implemented, the applicant is responsible for obtaining the consent of the lessor and ensuring that project implementation does not violate the lease agreement.
- If selected for funding, applicants must be able to execute a grant agreement within 30 days of receiving a notice of award.
- The HSP Incentives Program funds may be combined with other funds from public and private sources as cost-share for the same project.

EXCLUSIONS

- APNs that have previously received HSP Incentives or Demonstration awards are not eligible.
- HSP Incentives Program funds cannot be used to implement management practices that are not listed under [Eligible Agricultural Management Practices](#) in this grant solicitation.
- HSP Incentives Program funds cannot be used to fund fields or APNs with existing and ongoing implementation of any agricultural management practices listed under [Eligible Agricultural Management Practices](#) including APNs for which a HSP Demonstrations or Incentives project was

previously awarded.

- Compost Application Practices may not be implemented on APNs where soil organic matter content is greater than 20 percent by dry weight in top 20 cm (or 8 inch) depth.
- HSP Incentives program funds cannot be used for projects that use potted plants or other plant growth media.

TIMELINE

The application period begins [date will be inserted]. The deadline to submit a grant application is [date will be inserted; application period will be 8 weeks]. No exceptions will be granted for late submissions.

Activity	Tentative Date
Invitation to Submit Grant Applications	November 2018
CDFA Grant Application Workshops and Webinar	December 2018
Applications Due (in eight weeks)	January 2019
Review Period	January – March 2019
Award Announcement	March 2019

WORKSHOPS AND TECHNICAL ASSISTANCE

CDFA will conduct three workshops and two webinars on the 2018 HSP grant application process and program requirements.

CDFA cannot assist in the preparation of grant applications; however, general questions may be submitted to grants@cdfa.ca.gov. CDFA will conduct five rounds of Questions and Answers (Q&A) to address general questions about the application submission process and program requirements. Responses to all questions received during the workshops and webinars or by email will be posted to CDFA's HSP [Incentives Program](#) website [schedule will be provided].

In addition, CDFA-funded Technical Assistance (one-to-one on-demand assistance) across the state will be provided free of cost to all potential applicants. These technical assistance providers should not charge any additional fees or subsequent commitments (financial or otherwise) to help submit applications. Assistance may include technical aspects of the application process such as GHG calculation requirements, practice selection, and/or project design. CDFA strongly encourages applicants to obtain technical assistance when developing a grant application.

Information about CDFA-conducted workshop, webinars and CDFA-funded Technical Assistance will be posted on the HSP Incentives Program website:

<https://www.cdfa.ca.gov/oefi/healthysoils/IncentivesProgram.html>.

ELIGIBLE AGRICULTURAL MANAGEMENT PRACTICES

CDFA has identified eligible agricultural management practices that sequester carbon, reduce atmospheric GHGs and improve soil health for the 2018 HSP projects. An applicant must include the APN(s) of the field(s) where the eligible management practice(s) will be implemented. An applicant may include multiple practices on the same APN or the same practice on multiple APNs. Some practices may not be implemented on the exact same field as part of the same project. Refer to [Appendix II, Document 5](#) for details.

The following management practices were selected from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Conservation Practice Standards (CPS) and CDFA specified Compost Application Practices. HSP-specific GHG Quantification Methodology is currently available for these practices.

Soil Management Practices

- Cropland Management Practices
 - Cover Crop ([USDA NRCS CPS 340](#))
 - Conservation Crop Rotation ([USDA NRCS CPS 328](#))
 - Mulching ([USDA NRCS CPS 484](#))
 - Nutrient Management ([USDA NRCS CPS 590](#)) (15% reduction in fertilizer application *only*)
 - Residue and Tillage Management – No-Till ([USDA NRCS CPS 329](#))
 - Residue and Tillage Management – Reduced Till ([USDA NRCS CPS 345](#))
 - Strip Cropping ([USDA NRCS CPS 585](#))
- Compost Application Practices
 - Compost Application to Annual Crops
 - Compost Purchased from a Certified Facility
 - On-farm Produced Compost
 - Compost Application to Perennials, Orchards and Vineyards
 - Compost Purchased from a Certified Facility
 - On-farm Produced Compost

Note: Technical specifications for compost application and type of compost eligible for funding are noted under [Technical Specifications for Estimation of GHG Benefits](#).

Herbaceous Cover Establishment on Cropland Practices

- Conservation Cover ([USDA NRCS CPS 327](#))
- Contour Buffer Strips ([USDA NRCS CPS 332](#))
- Field Border ([USDA NRCS CPS 386](#))
- Filter Strip ([USDA NRCS CPS 393](#))
- Forage and Biomass Planting ([USDA NRCS 512](#))
- Grassed Waterway ([USDA NRCS CPS 412](#))
- Herbaceous Wind Barrier ([USDA NRCS CPS 603](#))
- Riparian Herbaceous Cover ([USDA NRCS CPS 390](#))

- Vegetative Barriers (601) ([USDA NRCS CPS 601](#))

Woody Cover Establishment on Cropland Practices

- Alley Cropping ([USDA NRCS CPS 311](#))
- Hedgerow Planting ([USDA NRCS CPS 422](#))
- Multi-story Cropping ([USDA NRCS CPS 379](#))
- Riparian Forest Buffer ([USDA NRCS CPS 391](#))
- Tree/Shrub Establishment ([USDA NRCS CPS 612](#))
- Windbreak/Shelterbelt Establishment ([USDA NRCS CPS 380](#))

Grazing Lands Practices

- Compost Application to Grassland
 - Compost Purchased from a Certified Facility
 - On-farm Produced Compost

Note: Technical specifications for compost application and type of compost eligible for funding are noted under [Technical Specifications for Estimation of GHG Benefits](#).
- Prescribed Grazing ([USDA NRCS CPS 528](#))
- Range Planting ([USDA NRCS CPS 550](#))
- Silvopasture ([USDA NRCS CPS 381](#))

TECHNICAL SPECIFICATIONS FOR ESTIMATION OF GHG BENEFITS

Implementation of practices must be consistent with the USDA NRCS Conservation Practice Standard (CPS) for that practice (wherever applicable).

To estimate the net GHG benefits due to a practice implementation, the expected life of the practice is as follows:

Eligible Agricultural Management Practice	Practice Lifespan*
Soil Management Practices	3 Years
Cropland to Herbaceous Cover Practices	3 Years
Grazing Lands Practices, except Silvopasture	3 Years
Woody Cover Establishment Practices and Silvopasture	10 Years

*Practice lifespan for the HSP is different from that required by USDA-NRCS.

Compost Application Rates Eligible for Funding:

Crop Type	Compost Type	Dry Short Tons/Acre*
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Annual Crops	Higher N (C:N \leq 11)	2.2 – 3.6
	Lower N (C:N $>$ 11)	4.0 – 5.3
Tree / Perennial	Higher N (C:N \leq 11)	1.5 – 2.9
	Lower N (C:N $>$ 11)	4.0 – 5.3
Rangeland	Lower N (C:N $>$ 11)	4.0 – 5.3

*Compost application rates eligible for funding through this program were developed under the guidance of the [Environmental Farming Act – Science Advisory Panel \(EFA-SAP\)](#) and are published in a white paper report titled “Compost Application Rates for California Croplands and Rangelands for a CDFA Healthy Soils Incentives Program” (abbreviated as [Compost Application White Paper](#)) by CDFA.

* If compost being applied is purchased: Compost must be produced by a facility permitted or otherwise authorized by state and local authorities that can demonstrate compliance with all state regulations. STA (US Composting Council’s Seal of Testing Assurance Program) or CDFA-OIM (Organic Input Material) Program certified compost is recommended.

* If applying on-farm produced compost: Plant and animal materials must be composted through the processes outlined below and a farm log must be maintained to document the process:

1. *In-vessel or Static Aerated Pile System*: Maintained a temperature between 131°F and 170°F for 3 days;
 2. *Windrow Composting*: Maintained a temperature between 131°F and 170°F for 15 days.
- The materials must be turned a minimum of five times.

C:N ratio and moisture content of the compost to be applied must be verified through laboratory testing before application. Type of material(s) used for composting must be documented.

Compost used in this practice must be produced at the agricultural operation that the project is located on. Externally sourced compost must be purchased from a certified facility.

Compost used in this practice cannot be vermicompost.

Assistance in selecting species to be planted when implementing cover crop, herbaceous, and woody cover establishment practices is available through the USDA NRCS California eVegGuide, at <https://www.calflora.org/nrcs/>. Step-by-Step Instructions to use the USDA NRCS California eVegGuide are provided in [Appendix II, Document 6](#). CDFA strongly encourages applicants to enhance on-farm biodiversity through utilizing plant species (in applicable management practices) that support pollinator habitat and help meet the goals identified in the [California Biodiversity Action Plan](#).

There may be additional requirements or guidelines for implementation of specific practices in addition to those provided in the respective USDA NRCS CPS documentation. Refer to [Appendix II, Document 3](#) for guidance.

PROGRAM REQUIREMENTS

- Eligible agricultural management practices can be implemented alone or in combinations, except where specified, on one APN or several APNs. Specific fields within each APN where agricultural management practice(s) will be implemented should be named Field 1, Field 2, Field 3, etc.
 - All fields must have the selected agricultural management practices implemented each year for the duration of the project term.

- Implementations must begin prior to the end of each project year.
- Multiple management practices may be included within the same APN except where specified, and multiple APNs within the same agricultural operation may be included in the project.
- Once awarded, recipients may not change the APNs included in the grant application through the duration of the project.
- Implementation of eligible management practices will be incentivized based on payment rates provided in [Appendix II, Document 3](#).

APPLICANT ID

An agricultural operation can only submit one grant application using a unique tax identification number. If an agricultural operation does not have a unique tax identification number, that operation should only use the last four digits of their social security number (e.g., 000-00-1234) as their unique business identification number in their grant application.

An agricultural operation must use the operation's legal business name and associated tax identification number in their application. The business name provided in the application is the entity to which CDFA will extend a Grant Agreement if the project is selected for an award. (See: [Award Process](#)).

PROJECT DURATION AND COST SHARING

The HSP Incentives Program will provide funds for the grant duration beginning July 1, 2019 to March 31, 2022. Though not required, applicants are encouraged to provide cost share to the project through the grant duration. Cost sharing can be in the form of matching funds or in-kind contributions. Matching funds refers to a dollar amount committed to a project from a source other than the HSP Incentives Program. An in-kind contribution is the estimated dollar value of any time, property, or supplies donated to a project, including costs associated with labor for work involved in the implementation of the proposed project.

Those who provide cost sharing may receive additional consideration during the project review (See [Additional Considerations](#)). Applicants are required to certify that cost-share, if provided, has been secured at the time of application submission.

Timeline for implementation of awarded projects is provided below:

Project Year	Duration of Project Year	Implementation Must Begin No Later Than
1	July 1, 2019 – June 30, 2020	December 31, 2019
2	July 1, 2020 – June 30, 2021	December 31, 2020
3	July 1, 2021 – March 31, 2022	December 31, 2021

BASELINE DATA

Applicants must submit the following baseline data at the time of application.

- Cropping history in the past three years (October 2015 – October 2018) in all APN(s) included in

the application.

- Management practice history in the past three years (October 2015 – October 2018) in all APN(s) included in the application.
- Applicants proposing to include Compost Application Practices in their projects must use the [California Air Resources Board's Compost Ineligible Tool](#) to check if the project site is eligible for compost application. Compost Application is not allowed on an APN that has soil organic matter content greater than 20 percent by dry weight for a 20 cm (or 8 inch) depth. Instructions to use the tool are available in [Appendix II, Document 8](#).

GHG REDUCTION ESTIMATION

An estimation of the reduction in GHG emissions from the selected [Eligible Agricultural Management Practices](#) must be calculated using the Quantification Methodology (QM) and calculator tools developed by the California Air Resources Board (CARB). The QM and calculator tool are adapted from the USDA-NRCS COMET-Planner methodology. The QM and calculator tool used for HSP will be available at the CARB Quantification Materials website:

<https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/quantification.htm>.

Once on the website, click on the QM for instructions on how to use the GHG reduction calculation tools for the selected type of management practices (as indicated below). The web links to the GHG calculator tools are provided in the QM. The current version of the QM is available at

<https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/cdfahsfinalqm16-17.pdf>.

A Carbon Sequestration and GHG Estimation Report will be generated upon completion of the calculation, which must be included as part of the application, and is required for all eligible agricultural management practice(s) selected. Projects eligible for HSP funding must achieve net GHG reductions, i.e., GHG reductions estimated using the QM and calculator tool must be positive in consideration of all the practices selected.

GRANT APPLICATION PROCESS

HOW TO APPLY

The 2018 HSP Incentives Program will be a web-based application process. The grant application is a series of questions regarding the proposed project. Questions are answered in one or more of the four following formats: a drop-down menu; a check box; a text box with predetermined character limitations; or as a document attachment. Responses to all questions must be submitted in the manner and format required by the application questionnaire electronically without exception. Preview of application questions is available in [Appendix II, Document 2](#).

Applicants are encouraged to gather all required information using information provided in [Appendix I](#) to facilitate effective and timely submission of the grant application.

REVIEW AND EVALUATION PROCESS

REVIEW PROCESS

CDFA will conduct multiple levels of review during the grant application process. The first level review is an administrative review to determine whether application requirements were met and if applicable, assess an applicant's past CDFA grant performance. All required documentation must be submitted to avoid disqualification.

The second level review is a technical review to evaluate the feasibility and overall expected success of the project, including selection of HSP practices associated with suitable crop/land type, a clear and proper project design, a reasonable implementation timeline (work plan), the correct estimation of GHG emission reductions and carbon sequestration, and the potential for the project to reduce GHG emissions, sequester carbon, improve soil health, and provide other co-benefits (e.g., air and water quality improvement). The technical review committee is made up of academic researchers, extension specialists, and farm advisors affiliated with the University of California and California State University systems.

CDFA will select applications for funding based on the scores provided by the review committee (See [Evaluation Criteria](#))

EVALUATION CRITERIA

Applications are evaluated based on the following criteria. An application must receive a total score of 60 to be considered eligible for funding. Detailed scoring criteria are provided in [Appendix II, Document 7](#).

Criteria	Score
Project Feasibility	40
Project Sustainability	20
GHG Emission Reduction Benefits	20
Soil Health and Environmental Co-Benefits	10
Conservation Plan	10
Total	100

The following applicants and/or projects will be prioritized for funding:

- Socially Disadvantaged Farmers or Ranchers¹, consistent with the [Farmer Equity Act of 2017](#);
- Projects serving Severely Disadvantaged Communities (SDACs)² consistent with [California](#)

¹ "Socially disadvantaged farmer or rancher" means a farmer or rancher who is a member of a socially disadvantaged group. "Socially disadvantaged group" means a group whose members have been subjected to racial, ethnic, or gender prejudice because of their identity as members of a group without regard to their individual qualities. These groups include all of the following:

(1) African Americans (2) Native Indians (3) Alaskan Natives (4) Hispanics (5) Asian Americans (6) Native Hawaiians and Pacific Islanders.

² "Severely disadvantaged community" means a community with a median household income less than 60 percent of the statewide average.

ADDITIONAL CONSIDERATIONS

During the review process, the following additional considerations will be evaluated when selecting projects for an award of funds:

- Applicants that provide matching funds during grant duration (July 1, 2019 – March 31, 2022).

ASSISTANCE AND QUESTIONS

CDFA cannot assist in the preparation of grant applications; however, general questions may be submitted to grants@cdfa.ca.gov. CDFA will conduct 5 rounds of Questions and Answers (Q&A) to address general questions about the application submission process and program requirements. Responses to all questions received during the workshops and webinars or by email will be posted to CDFA's HSP Incentives Program website: <https://www.cdfa.ca.gov/oefi/healthyssoils/IncentivesProgram.html> according to the following schedule.

One-on-one technical assistance will be provided by third parties (California academic research institutions, California Resource Conservation Districts and non-profit organizations) during the application period.

NOTIFICATION AND FEEDBACK

All applicants will be notified by email regarding the status of their grant application. Applicants not selected for funding will receive feedback on their grant application within 60 days after receiving notification.

DISQUALIFICATIONS

The following will result in the disqualification of a grant application:

- Incomplete grant applications: applications with one or more unanswered questions necessary for administrative or technical review.
- Incomplete grant applications: applications with missing, blank, unreadable, corrupt, or otherwise unusable attachments.
- Applications requesting funding for more than the maximum award amount.
- Applications with unallowable costs or activities not necessary to complete the project objectives.

APPEAL RIGHTS: Any discretionary action taken by the Office of Grants Administration (OGA) may be appealed to CDFA's Office of Hearings and Appeals within ten (10) days of receiving a notice of disqualification from CDFA. The appeal must be in writing and signed by the responsible party named on the grant application or his/her authorized agent. It must state the grounds for the appeal and include any supporting documents and a copy of the OGA decision being challenged. The submissions must be sent to the California Department of Food and Agriculture Office of Hearings and Appeals, 1220 N Street,

Sacramento, CA 95814 or emailed to CDFA.LegalOffice@cdfa.ca.gov. If submissions are not received within the time frame provided above, the appeal will be denied.

AWARD PROCESS

PRE-PROJECT CONSULTATION

After receiving notification of award, each recipient will be contacted by CDFA, to conduct a pre-project consultation. A CDFA environmental scientist will discuss with the recipient the project work plan, including management practice(s), APN, field number, acreage, materials and/or plant species (if applicable) associated with practice implementation, and budget. The purpose of the pre-project consultation is to ensure that practices and implementation methods in the funded project are compliant with 2018 HSP Incentives Program requirements and to allow CDFA to schedule for verification site visits.

GRANT AGREEMENT

CDFA will initiate the Grant Agreement process with applicants selected to receive a 2018 HSP Incentives Program grant award. Applicants with projects selected for an award of funds will receive a Grant Agreement package with specific instructions regarding award requirements including information on project implementation, verification, and payment process.

PROJECT IMPLEMENTATION

Once a Grant Agreement is executed, the grant recipient may begin implementation of the project. Recipients are responsible for the overall management of the awarded project to ensure all project activities are completed as identified in the Grant Agreement.

Implementation must begin on or after July 1, 2019, but no later than December 31, 2019. Failure to implement the project prior to December 31, 2019 may result in all or any portion of the grant funding withheld or termination of the Grant Agreement.

PROJECT REPORTING REQUIREMENTS

Recipients are required to report annually on a soil organic matter content for each APN/ Field. Once prior to project implementation, one year after, and two years following initial project implementation.

Each submission should contain a laboratory report of soil organic matter content for each APN from any of the accredited soil analytical laboratories recommended by CDFA³. The soil sampling protocol provided in [Appendix II, Document 4](#) must be followed when collecting soil samples.

PAYMENT PROCESS

Grant payment for the 2018 HSP Incentives Program will be on a reimbursement basis through yearly

³ CDFA recommended soil analytical labs are listed in [Appendix II, Document 4](#).

invoicing upon practice verification. CDFA will provide the grant recipient with the necessary grant award and invoicing documents (See: [Project Verification](#)).

CDFA will withhold ten percent from the total grant award until the verification requirement is complete to ensure grant recipients complete the project as approved by CDFA. This ten percent withhold may not be appealed. Invoicing and closeout of all project expenditures must be completed no later than March 31, 2022.

ADVANCE PAYMENTS

Applicants interested in requesting an advance payment are subject to the following as required by Proposition 68 (SB 5) and state requirements.

- Advance payments up to 25 percent for project expenditures for a three-month period can be requested for projects in Disadvantaged Communities (DACs) and Severely Disadvantaged Communities (SDACs) only⁴. The following link shows the DAC and SDAC regions in the state: <http://www.parksforcalifornia.org/communities>.
- If applicant desires an advance payment, a detailed itemized budget must be submitted. Flat payment rate budgets will not be accepted in the case of advance payments. See [V. Budget Worksheet](#) for information.
- The applicant must identify any anticipated advances in quarterly payment schedules.
- Any advance payments must be utilized within three months of receipt.
- Advance payment funds must be deposited into a federally-insured interest-bearing bank account that provides the ability to track interest earned and withdrawals, set up and identified prior to the advance.
- Any interest earned shall be remitted to the CDFA.
- If funds are advanced and not expended, the unused portion of the funds shall be returned to CDFA within 60 days of completion of the Project.
- If more than one advance payment is anticipated, additional advance payments will be made only after receipt of evidence that the prior advance was fully disbursed and expended. Evidence of disbursement can include a copy of the canceled check or warrant issued; or in lieu of a canceled check or warrant, copies of “paid” invoices from the contractors/vendors to which the advance was made.
- Labor costs (personnel costs) are not eligible for advance payments.

PROJECT VERIFICATION

Recipients will be subjected to verification that the eligible agricultural management practices are implemented in a manner consistent with the USDA NRCS CPS guidelines and/or CDFA Compost Application White Paper requirements. Verification will be conducted by CDFA environmental scientists who will conduct field evaluations by APN to verify program compliance during the grant agreement term.

⁴ For the purpose of advance payments, DAC means a community with a median household income less than 80 percent of the statewide average. SDAC means a community with a median household income less than 60 percent of the statewide average.

CDFA will be responsible for the expense of verification.

The purpose of project verification is to determine whether and when deliverables are being met and evaluate project progress to ensure the eligible agricultural management practice(s) are completed within the grant agreement term. Recipients may be required to submit financial records and project related documentation (such as receipts for payment of services/goods) to ensure HSP Incentives Program funds are used in compliance with the Grant Agreement terms and conditions. Specific verification requirements for each practice can be found in [Appendix II, Document 3](#). The verification must be completed by March 31, 2022.

Consistent with SB 5 (2018), the State of California has the right to review project documents and conduct audits during project implementation and over the project life.

POST-PROJECT COMPLETION REQUIREMENTS

Execution of the Grant Agreement is conditional upon agreement to post-project completion requirements. Recipients are required to maintain implementation of practices incentivized through this program for a minimum of 3 years through the term of the grant agreement. However, benefits from implementation of practices are expected to be achieved in the long term. Recipients are encouraged to continue and/or expand these practices on their operations to achieve long-term benefits. Additionally, grant recipients are required to maintain, three years after completion of project, documentation related to their HSP funded projects, including records documenting maintenance of the agricultural management practice(s) and any soil testing reports for the project APNs, to keep records of actual benefits achieved from the project.

Failure to work with CDFA to provide the necessary project-related documentation will be considered non-performance. In the event of non-performance, CDFA may take any action deemed necessary to recover all or any portion of the grant funding.

CDFA will contact a subset of awarded projects to collect data including, but not limited to, eligible agricultural management practice implementation and GHG reduction estimates, for three years after project completion.

APPENDIX I: REQUIRED APPLICATION DOCUMENTS

All required application documents must be submitted by the deadline specified in this solicitation. In addition to the mandatory and optional attachments each applicant will provide, applicants must download, complete and upload the templates provided below.

- Project Timeline and [Work Plan Template](#)
- [Budget Worksheet](#) (must be submitted in the Excel Format)

The mandatory and applicable attachments include:

- Project Design Schematic
- Carbon Sequestration and GHG Estimation Report
- Screenshot of result from Compost Ineligibility Tool (if applicable)
- Landowner Agreement (if applicable)
- Conservation Plan (if applicable)
- Supporting Documents showing that the project provides benefits to SDACs (Severely Disadvantaged Communities), SDGs (Socially Disadvantaged Groups) or Priority Populations (if applicable)

Applicants are encouraged to review the following documents which help them prepare applications.

- Application Check List ([Appendix II, Document 1](#))
- Preview of Application Questions ([Appendix II, Document 2](#))

APPENDIX II: REFERENCE DOCUMENTS TO ASSIST PREPARATION OF APPLICATION

Document 1: Application Check List

Check the box below for each file included in the application to be submitted electronically:

- ☐ Project Design
- ☐ Budget Worksheet
- ☐ Carbon Sequestration and GHG Estimation Report
- ☐ Project Timeline and Work Plan
- ☐ Screenshot of result from Compost Ineligibility Tool*
- ☐ Landowner Agreement*
- ☐ Supporting Documents for Applications That Provide Benefits to SDACs, SDGs or Priority Populations*

(If applicable.)*

Document 2: Preview of Application Questions

I. APPLICATION OVERVIEW

Applicant Organization:

Click here to enter the legal name of the organization that will serve as lead for the project and will receive grant funds.

Submitting Organization:

If applicable, click here to enter the legal name of the organization submitting on behalf of the applicant.

Cooperating Entities:

Click here to list the cooperating entities and identify the role or contribution each will make to the project.

Is the applicant any of the following? Check appropriate box.

African American

Native Indian

Alaskan Native

Hispanic

Asian American

Native Hawaiian and Pacific Islander

Served on active duty in the U.S. Armed Forces, Reserves, or National Guard

Gender: Male Female Decline to state

Project Title:

Click here to provide a concise description of the project in 15 words or less.

Project Description (Abstract) (300 words or less)

Click here to summarize the need for the project, describe the goals and outcomes, and present a plan for evaluating and measuring the success of the project. *

**The Project Description should minimize the use of technical terms and be appropriate for dissemination to the public as it may be included with information shared publicly for projects funded through California Climate Investments.*

Project Budget:

Funds Requested:

Cost Share:

Total Budget:

** Cost sharing is not a requirement; however, cost sharing is encouraged and may serve as evidence to demonstrate commitment to, or support for, the project.*

Agricultural Operation Data:

Total size of the applicant's farm/agricultural organization: Click here to enter the total farm/agricultural organization size (in acres).

Assessor's Parcel Number (APN) that will be impacted by the proposed

Healthy Soils project: Click here to enter APN(s).

Ensure to use the APN format that is used by your county Assessor's Office. Visit your county's Assessor's Office in person or the Assessor's Office webpage to look up or verify the APN(s).

Address or Nearest Cross Streets: Click here to enter address.

City, Zip Code: Click here to enter city and zip code.

County: Click here to enter the county.

II. PROJECT LOGISTICS

Project Site Information:

Assessor's Parcel Number (APN)	Address (or nearest cross street) City, Zip Code	Latitude	Longitude	Leased Land?*

* If it is a leased land, provide a copy of a letter of agreement from the landowner to implement proposed management practices for the duration of the grant term.

Does the Applicant own the land to be impacted by the Healthy Soils Program?: Yes or No

If leasing land, applicants must include a letter of agreement from the land owner stating their consent to the project implementation for the duration of the project term. Include the letter as an attachment and name it "Incentives_[ApplicantName]_[taxIDlast4digits]_LandownerAgreement".

Are there multiple fields on which agricultural management practices will be implemented within a single APN?: Yes or No

Project Logistics:

Enter the required data regarding the proposed project logistics. This will include a list of APNs, the eligible agricultural management practices to be implemented, and the acreage involved for each practice. A practice that was implemented previously (January 2017 – present) is not eligible for grant funds.

APN #	Field #	Name of HSP Practice	Acres to Be Implemented	Was the Practice Implemented Previously?

Baseline Data:

Provide the cropping history for the past three years (January 2015 - January 2018) for all APNs included in the project.

[Click here to enter the cropping history.](#)

Provide the management practice history for the past three years (January 2015 - January 2018) for all APNs included in the project.

[Click here to enter the management practice history.](#)

Does the project include Compost Application Practices?: Yes or No

If yes, applicant must use the Compost Ineligible Tool (at www.arb.ca.gov/cci-quantification) developed by Air Resources Board to determine if the proposed field/APN is eligible or not for Compost Application Practice(s), create a screen shot and upload here to serve a proof of eligibility for Compost Application. Instructions on using the Tool are available in [Appendix II Document 8](#).

[Click to upload screen shot here.](#)

III. PROJECT DESIGN:

Provide a project design schematic, with a map that includes:

1. The specific APNs where eligible management practices will be implemented.
2. A layout of where all eligible management practices will be implemented.
3. The total acreage for each eligible management practice to be implemented.
4. Indicate the plant species to be planted on each field, if applicable.

[Click here to provide a design schematic, including a map of the agricultural operation.](#)

If the project will involve compost or mulch application, check appropriate box below:

- Is the compost or mulching material(s) produced on farm?

- Compost Yes or No
- Mulch Yes or No
- Is the compost or mulching material(s) be purchased?
 - Compost Yes or No
 - Mulch Yes or No

If the project implements cover crop, herbaceous or woody cover practices, provide names of plant species, seeding rate, and/or number of each species for specific practices in the project. For assistance on how to select plant species for cover crop, herbaceous cover and woody plantings, please check [Appendix II, Document 6.](#)

Click to enter information here.

IV. WORK PLAN:

Download [the Project Work Plan Template](#). Follow the instructions and complete the template.

Click to upload the completed Work Plan Template.

V. BUDGET WORKSHEET

If Project is not Requesting 25% Advance Payment

Download the [Budget Worksheet](#) and save it on your computer. On the Budget Worksheet, fill in the information only in the yellow highlighted areas. Please note that (1) for practices with payment units in acres, enter only acreage, (2) for practices with payment units in feet, enter only feet to be implemented, (3) for Compost Application, enter both acreage and application rate, (4) for soil organic matter analysis, enter number of soil samples to be taken each year, (5) for the optional Matching Funds to be provided in 2018 and 2019, enter the total amount you plan to contribute for each practice. Once you finish entering all necessary information for practices to be implemented in the project, the document will automatically calculate the total grant funding amount and the total matching funds amount.

For detailed information on determining the number of soil samples to be taken for soil organic matter analysis and proper soil sampling, please review [Appendix II, Document 4.](#)

Click to upload the completed Budget Worksheet.

If project is Requesting 25% Advance Payment

Download and complete the [Itemized Budget Worksheet for Advance Payments](#) and clearly indicate the costs for being advance is being requested. Labor costs (personnel costs) are not eligible for advance

payments. The total project budget must not exceed the corresponding [standard payment rates](#) for proposed practices.

Cost Share:

The 2018 HSP funds will cover project cost based on the 2018 HSP Incentives Program Payment Rates. Cost share is not required but is encouraged.

CERTIFY:

☐ By checking the box to the left, the applicant certifies that the total amount of cost share committed to the project has been secured for implementation of eligible management practices as applicable.

Amount	Type of Cost Share* (Matching Funds or In-Kind Contribution)	Source (Include Contact Information)	Summary of Activities or Costs Covered with Matching Funds or In-kind Contributions

* *Matching funds refers to a dollar amount committed to your project from a source other than the Healthy Soils Program. An in-kind contribution is the estimated dollar value of any time, property, or supplies donated to your project.*

VI. PROJECT SUSTAINABILITY:

1) Explain why this project is important to the agricultural operation. (500 words or less)

[Click here to provide an explanation of the project importance.](#)

2) Describe how the project will be sustained beyond the project term. Include anticipated learning or successes from the implemented management practices and how this will affect future adoption (e.g., continuing the practice(s) in the long-term (>3 years) and/or adding the practice(s) to new fields). (500 words or less)

[Click here to enter project sustainability](#)

3) Describe how you plan to assess and measure possible changes and impacts after project implementation. (500 words or less)

[Click here to describe the assessment plan.](#)

VII. GHG REDUCTION ESTIMATION:

Indicate the estimated greenhouse gas emission reductions from the project (Tonnes of CO₂ equivalent/acre) located in the CARB Calculator Tool(s). For each practice, please calculate total acreage to be implemented in order to calculate GHG reduction estimation.

Before proceeding with this application, applicant must follow guidance of CARB Greenhouse Gas (GHG) Quantification Methodology for CDFA Healthy Soils Program and use CARB Greenhouse Gas (GHG) calculator Tools to estimate project GHG benefits.

When using the model tools, please make sure to:

- (1) Select the correct county where your project site is located,
- (2) Select the correct practice implementation (refer to column **C** in your budget worksheet), and
- (3) Enter the correct acres for each practice (refer to the column **titled acres** in your budget worksheet).

Enter the estimated greenhouse gas emission reductions from the project as indicated below.

[Click here to enter the total CO₂ equivalent.](#)

[Click to upload the Carbon Sequestration and GHG Estimation Report.](#)

VIII. SOIL HEALTH AND ENVIRONMENTAL CO-BENEFITS:

Describe environmental benefits achieved through implementing the proposed project in the short (within three years) and long-term (beyond three years). Describe how the proposed project will improve soil health. Provide a qualitative description of the environmental co-benefits of the proposed project such as water and air quality improvements, and ecosystem services. (500 words or less)

[Click here to describe the environmental benefits.](#)

IX. CONSERVATION PLAN:

Although optional, applications that include a qualified conservation plan will receive additional consideration during review. For more information on what to provide in the Conservation Plan, reference page 11 of the Request for Grant Applications. The Conservation Plan must be detailed below and include all of the following:

1. An aerial photo or diagram of project fields.
2. A list of current management decisions.
3. The location of and schedule for applying new conservation practices.
4. A Resource Assessment. This includes an inventory of resources and resource concerns, soils information, topographic maps, plan maps showing location of property, existing practices, structures, planned practices, soils, water features and other environmentally sensitive areas, and environmental assessment.
5. Information explaining how specific management decisions will be implemented.
6. A plan for operation and maintenance of selected management practices.

[Click here to enter the conservation plan.](#)

X. SEVERELY DISADVANTAGED COMMUNITIES, SOCIALLY DISADVANTAGED GROUPS AND PRIORITY POPULATIONS

Severely Disadvantaged Communities

To qualify as serving severely disadvantaged communities (SDACs), check one or more boxes:

- (i) Is the project located in an SDAC as identified using the Community FactFinder (2018) Tool available at: <http://www.parksforcalifornia.org/communities>? Yes or No
- (ii) Will the project employ workers/contractors from SDACs? Yes or No

Socially Disadvantaged Groups

Does the applicant belong to a socially disadvantaged group as defined below? Yes or No

If yes, check box below:

- African Americans.
- Native Indians.
- Alaskan Natives.
- Hispanics.
- Asian Americans.
- Native Hawaiians and Pacific Islanders

Priority Populations

Projects must satisfy the applicable criteria listed in Steps 1 through 3 to be considered to provide direct, meaningful, and assured benefits to priority populations⁵. If applicable, at least one of the boxes in each of the steps below must be checked and all relevant supporting documentation provided.

Step 1 – Identify the Priority Population(s).

Evaluate the project against each of the following criteria. Check all boxes that apply.

Note: The majority of the project must be located within a disadvantaged or low-income community census tract⁶. Yes or No

Is the project located within the boundaries of a disadvantaged community census tract? Yes or No

- a. Is the project located within the boundaries of a low-income community census tract? Yes or No
- b. Is the project located outside of a disadvantaged community, but within ½-mile of a disadvantaged community and within a low-income community census tract? Yes or No
- c. Is the project located within the boundaries of a low-income household? Yes or No

Continue with Step 2 only if at least one of boxes in Step 1 were checked.

Step 2 – Address a Need.

⁵ Priority populations include residents of: (1) census tracts identified as disadvantaged by California Environmental Protection Agency per SB 535; (2) census tracts identified as low-income per AB 1550; or (3) a low-income household per AB 1550. See Section VII.B for more information on the definitions of priority populations

⁶ An online mapping tool of Priority Populations is available at: <https://www.arb.ca.gov/cc-communityinvestments>.

Identify an important community or household need and evaluate whether the project provides a benefit that meaningfully addresses that need. Check the box that applies:

- a. Did you host community meetings, workshops, outreach efforts, or public meetings as part of the planning process to engage local residents and community groups for input on community or household needs, and document how the received input was considered in the design and/or selection of projects to address those needs? Documents providing evidence of meetings must be provided as attachments. Yes or No
Click to upload the attachments.
- b. Did you receive documentation of support from local community-based organizations and/or residents (e.g., letters, emails) identifying a need that the project addresses and demonstrating that the project has broad community support? Yes or No
If yes, letters of support must be provided as attachments.
Click to upload the attachments.
- c. If direct engagement is infeasible, did you look at the individual factors in [CalEnviroScreen3.0](#) that are most impacting an identified disadvantaged or low-income community (i.e., factors that score above the 75th percentile), and confirm that the project will reduce the impacts of at least one of those factors? Yes or No
If yes, explain the impacts and how they will be reduced by the project.
Click to enter text.
- d. If direct engagement is infeasible, did you refer to the list of common needs for priority populations in CARB's Funding Guidelines Table 5 and confirm that the project addresses at least one listed need? Yes or No
If yes, describe the need and explain how the project will address it.
Click to enter text.

Proceed to Step 3 only if one of the boxes were checked under Step 2 and relevant supporting documentation was provided.

Step 3 – Provide a Benefit.

Evaluate the project against each of the following criteria to determine if it provides direct, meaningful, and assured benefits to priority populations. The benefit provided must directly address the identified need. Check applicable box(es) and provide justification and/or documentation to support the claims below:

- a. Project significantly reduces exposure to dust and airborne particles to residents, relative to pre-project levels; Yes or No
- b. Project increases food access to priority populations through regular farmers markets, donations to food banks or distribution centers serving residents of disadvantaged or low-income communities, or low-income households; Yes or No
- c. Project provides regular and ongoing educational opportunities through partnerships with schools or non-profit organizations located in disadvantaged or low-income communities and site access to residents of these communities. Yes or No

Additional documents:

Click [here](#) to copy maps or other documentation to support any “Yes” answers in response to the Additional Considerations questions.

Document 3: HSP Practices Payment Rates and Implementation Guidelines and Verification Requirements

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate (\$/Unit)	Years to be paid
Residue and Tillage Management, No-Till (USDA NRCS CPS 329)	Intensive Till to No Till or Strip Till on Irrigated Cropland OR Non-Irrigated Cropland	No-Till or Strip-Till	(1) No tillage; (2) Planting method is no-till drilling or hand planting.	Any time of the year to look evidence of no soil disturbance	\$30.18/Ac	3
Cover Crop (USDA NRCS CPS 340)	Add Non-Legume Seasonal Cover Crop to Irrigated Cropland OR Non-Irrigated Cropland	Cover Crop: Basic	Cover crop should be allowed to grow to produce as much biomass as possible without delaying planting of the following crop.	(1) Cover crop is visible in the field at verification. (2) Receipts of cover crop seeds purchased.	\$126.44/Ac	3
	Add Legume Seasonal Cover Crop to Irrigated Cropland OR Non-Irrigated Cropland	Cover Crop: multiple species	Planting multi-species cover crop (two or more species) mix includes a small grain, a legume, and may include other species such as forage sorghum, radishes, buckwheat, etc..	(1) Mixed cover crop species are visible in the field at verification. (2) Receipts of cover crop seeds purchased.	\$147.00/Ac	3
Residue and Tillage Management, Reduced Till (USDA NRCS CPS 345)	Intensive Till to Reduced-Till on Irrigated Cropland OR Non-Irrigated Cropland	Reduced-Till	(1) Mulch or vertical tillage, chiseling or disking to limit soil disturbance, or (2) Fewer tillage operations.	Must meet depth, frequency or percent area of soil disturbance.	\$32.06/Ac	3
Nutrient Management (USDA NRCS CPS 590)	Improved N Fertilizer Management on Irrigated Cropland OR Non-Irrigated Cropland – Reduce Fertilizer Application Rate by 15%	Basic NM	A nutrient management budget will be developed for each field(s) based on soil test analysis and university of California recommendation rates or crop removal rates.	Receipts and farm log of nitrogen fertilizers showing application rates is 15% less than what was used in the past 3 years or UC recommended rates.	\$14.26/Ac	3
Conservation Crop Rotation (USDA NRCS CPS 328)	Decrease Fallow Frequency OR	Basic rotation	Effective implementation of a conservation crop rotation to provide high residue and/or perennial crops.	(1) check if rotation practices followed the plan and (2) the acreage	\$19.62/Ac	3
	Add Perennial Crop to Rotations	Specialty crops	Effective implementation of a rotation of organic or non-organic specialty crops (fruits & vegetables).	(1) check if rotation practices followed the plan and (2) the acreage	\$52.34/Ac	3

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate (\$/Unit)	Years to be paid
Residue and Tillage Management, Reduced Till (USDA NRCS CPS 345)	Intensive Till to Reduced-Till on Irrigated Cropland OR Non-Irrigated Cropland	Reduced-Till	(1) Mulch tillage, vertical tillage, chiseling or disking; (2) Fewer tillage operations.	Must meet depth, frequency or percent area of soil disturbance.	\$32.06/Ac	3
Mulching (USDA NRCS CPS 484)	Add High Carbon Mulch to Croplands	Natural Materials	1-3 inches thickness of straw or other natural materials	(1) $\geq 60\%$ soil surface covered; (2) Receipts of materials purchased.	\$385.70/Ac	3
		Wood Chips	2-3 inches thickness of wood chips	(1) Tree rows ($\geq 4'$ radius) covered; (2) Receipts of wood chips purchased.	\$1712.14/Ac	3
Strip Cropping (USDA NRCS CPS 585)	Add Perennial Cover Grown in Strips with Irrigated Annual Crops OR Non-Irrigated Annual Crops	Wind and water erosion control	(1) Two or more strips are required; (2) 50% or more vegetation cover must be perennial and erosion resistant crops.	(1) Number, width & length of strips; (2) species (perennial and erosion resistant)	\$2.64/Ac	1
Contour Buffer Strips (USDA NRCS CPS 332)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover OR Unfertilized Grass/Legume Cover	Introduced Species, Foregone Income	(1) Introduced cool season perennial grass; (2) Area of strips is taken out of production.	(1) Visible: cool season perennial grass in previous cropland. (2) Receipts of seeds purchased.	\$620.10/Ac	1
		Native Species, Foregone Income	(1) Native warm season perennial grass; (2) Area of strips is taken out of production.	(1) Visible: warm season perennial grass in previous cropland. (2) Receipts of seeds purchased.	\$615.08/Ac	1
		Wildlife Pollinator, Foregone Income	(1) Three or more native warm season perennial that are pollinator friendly species; (2) Area of strips is taken out of production.	(1) Visible: ≥ 3 species of native, warm season, pollinator friendly, perennials species. (2) Receipts of seeds purchased.	\$832.26/Ac	1
Field Border (USDA NRCS CPS 386)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover OR Permanent Unfertilized Grass/Legume Cover	Field Border, Introduced Species	(1) Introduced, cool season perennial grass; (2) Around the perimeter of a crop/rangeland.	(1) Visible: cool season perennial grass. (2) Receipts of seeds purchased.	\$136.64/Ac	1
		Field Border, Native Species	(1) Untreated, warm season, native perennial; (2) Around the perimeter of an agricultural land.	(1) Visible: warm season, native perennials. (2) Receipts of seeds purchased.	\$184.88/Ac	1
		Field Border, Pollinator	(1) Mixed species, native Forb; (2) Around perimeter of agricultural lands.	(1) Visible: mixed, native forbs. (2) Receipts of seeds purchased.	\$1,510.22/Ac	1

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate (\$/Unit)	Years to be paid
Riparian Herbaceous Cover (USDA NRCS CPS 390)	Convert Irrigated Cropland to Permanent Unfertilized Grass Cover Near Aquatic Habitats; OR Convert Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover Near Aquatic Habitats	Broadcast Seeding with Foregone Income	(1) Area is removed from crop production; (2) Six species mix, native Forb; (3) Existing plant community is disturbed.	(1) Visible: six or more native, pollinator friendly perennial species planted; (2) Receipts of seeds purchased.	\$3,481.40/Ac	1
		Plug Planting with Foregone income	(1) Area is removed from crop production; (2) Native aquatic plants, emergent or submerged.	(1) Visible: native, aquatic perennial species plug planted; (2) Receipts of seedlings purchased.	\$40,689.76/Ac	1
		Combination Broadcast Seeding and Plug Planting with Foregone Income	(1) Area is removed from crop production; (2) One species native forb and native aquatic plants, emergent or submerged.	(1) Visible: native, aquatic perennial species planted; (2) Receipts of seedlings & seeds purchased.	\$21,662.22/Ac	1
		Pollinator Cover with Foregone Income	(1) Area is removed from crop production; (2) 2-12 native forbs that bloom sequentially during the growing season and at least 2 species in bloom at any given time during the growing season.	(1) Visible: ≥ 4 native forbs bloom at different times in growing season planted in area of previous cropland. (2) Receipts of seedlings & seeds purchased.	\$4,764.60/Ac	1
Filter Strip (USDA NRCS CPS 393)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover OR Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Filter Strip, Native species	Native, warm season perennial grass	(1) Visible: perennial species planted in area of previous cropland. (2) Receipts of seeds purchased.	\$248.54/Ac	1
		Filter Strip, Introduced species	Introduced, cool season perennial grass and/or legume mix		\$268.16/Ac	1
Vegetative Barrier (USDA NRCS CPS 601)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover OR Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Seeded Barrier	A strip or strips of stiff, dense vegetation is established by seeding with width ≥ 3 feet.	(1) Visible: perennial species planted in area of previous cropland. (2) Receipts of seeds purchased.	\$0.02/Ft	1
		Vegetative Planting	Permanent strips of stiff, dense vegetation established along the general contour of slopes with width ≥ 3 feet.	(1) Visible: perennial species planted in area of previous cropland. (2) Receipts of sprigs purchased.	\$11.34/Ft	1

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate (\$/Unit)	Years to be paid
Herbaceous Wind Barriers (USDA NRCS CPS 603)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover OR Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Cool Season Perennial Species	Width of the Herbaceous Wind Barrier must be at least 2 feet.	(1) Visible: perennial species planted in area of previous cropland. (2) Receipts of seeds purchased.	\$0.14/Ft	1
Windbreak/ Shelterbelt Establishment (USDA NRCS CPS 380)	Replace a Strip of Cropland with 1 Row of Woody Plants OR Replace a Strip of Grassland with 1 Row of Woody Plants	1-row, trees, containers, hand planted, protected	(1) Minimum width of tree row is 8 feet; (2) Plant protection is required; (3) ≥ 200 plants/acre.	(1) Visible: live tree/shrubs plants. (2) Receipts of seedlings purchased.	\$1.22/Ft	1
		1-row, Tree or Shrub, with Wind Protection Fence	(1) Minimum width 8 feet for tree row and 4 feet for shrubs; (2) Plant protection is required; (3) ≥ 200 plants/acre.	(1) Visible: live tree/shrubs plants. (2) Receipts of seedlings purchased.	\$1.78/Ft	1
Silvopasture (USDA NRCS CPS 381)	Tree/Shrub Planting on Grazed Grasslands	Establish Trees, Existing Grasses	≥ 20 plants/acre is required.	(1) Visible: live tree/shrubs plants. (2) Receipts of seedlings purchased.	\$193.90/Ac	
Hedgerow Planting (USDA NRCS CPS 422)	Replace a Strip of Cropland with 1 Row of Woody Plants	Single Row	(1) Inclusion of pollinator-friendly shrubs and perennial wildflowers; (2) Combination of cool and warm season perennial species; (3) ≥ 200 plants/acre; (2) Row width ≥ 8 feet; (3) Average height at 15 feet wide at maturity; (4) Planting protection is needed.	(1) Visible: ≥ 200 live tree/shrubs plants/acre. (2) Receipts of seedlings purchased.	\$8.58/Ft	1
	Replace a Strip of Grassland with 1 Row of Woody Plants					
Riparian Forest Buffer (USDA NRCS CPS 391)	Replace a Strip of Cropland Near Watercourses or Water Bodies with Woody Plants OR Replace a Strip of Grassland Near Watercourses or Water Bodies with Woody Plants	Bare-root, hand planted	General: (1) Plantings consist of hand planted bare-root shrubs and trees; (2) ≥ 35 plantings per acre; and (3) Tree protection is required. Materials: (1) Hardwood trees: 18-36" tall; (2) Conifer trees: 1-1 (2 years old).	(1) Visible: ≥ 35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	\$2,367.00/Ac	1

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate (\$/Unit)	Years to be paid
Riparian Forest Buffer (USDA NRCS CPS 391)	Replace a Strip of Cropland Near Watercourses or Water Bodies with Woody Plants OR Replace a Strip of Grassland Near Watercourses or Water Bodies with Woody Plants	Bare-root, machine planted	(1) Bare-root shrubs and trees; (2) ≥ 35 plants/acre; (3) Tree Protection. Materials: (1) Hardwood trees: 18-36" tall; (2) Conifer trees: 1-1 (2 years old).	(1) Visible: ≥ 35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	\$2,223.16/Ac	1
		Cuttings, Small to Medium	(1) Hand planting; (2) ≥ 35 plantings per acre; and (3) Tree protection. Materials: 1/4"-1" diameter and 24-48" long.	(1) Visible: ≥ 35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	\$2,784.48/Ac	1
		Cuttings, Medium to Large	(1) Tree, shrub and live stakes planted by hand; (2) ≥ 35 plants/acre; (3) Tree protection. Materials: from 1/4-1" in diameter and 24-48" long to 2-6" in diameter and 0 6' long.	(1) Visible: ≥ 35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	\$7,183.68/Ac	1
		Small container, hand planted	(1) Shrubs and trees; (2) ≥ 35 plants/acre; (3) Tree protection. Materials: Potted shrub or tree size: 1 quart.	(1) Visible: ≥ 35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	\$3,749.36/Ac	1
		Small container, machine planted	General: (1) Planting consist of machine planted shrubs and trees; (2) ≥ 35 plantings per acre; and (3) Tree protection. Materials: Potted shrub or tree size: 1 quart.	(1) Visible: ≥ 35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	\$3,238.12/Ac	1
		Large container, hand planted	General: (1) Plantings consist of hand planted shrubs and trees; (2) ≥ 35 plantings per acre; and (3) Tree protection. Materials: Potted or balled shrub or tree size: 2-3 gal.	(1) Visible: ≥ 35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	\$9,427.38/Ac	1
Alley Cropping (USDA NRCS CPS 311)	Replace 20% of Annual Cropland with Woody Plants	Tree-planting, single row	(1) Potted or balled and burlapped hardwood tree size: 2-3 gal.	(1) Receipts of seedlings purchased; (2) species, (3) number of live plants	\$33.26/Ea	1

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate (\$/Unit)	Years to be paid
Multistory Cropping (USDA NRCS CPS 379)	Replace 20% of Annual Cropland with Woody Plants	Free trees or shrubs	For enhancement of multi-story agroforests or improvement of overstory on existing cropland.	(1) species names, (2) number of live plants	\$5.20/Ea	1
		Native shrub planting	Seedling size is no less than 1 qt.	(1) Receipts of seedlings purchased; (2) number of plants	\$9.86/Ea	1
		Native tree planting	Seedling size is no less than 1 qt.	(1) Receipts of seedlings purchased; (2) number of plants	\$9.86/Ea	1
		Non-native shrubs	(1) Bare root tree size is 6-18" tall, band pots of common species trees or shrubs, and/or (2) tree or shrub seedling containerized size is no less than 10 cu. in..	(1) Receipts of seedlings purchased; (2) number of e plants	\$7.74/Ea	1
		Non-native tree planting	(1) Bare root tree size 6-18" tall, band pots of common species trees or shrubs, and/or (3) Seedling containerized size is ≥10 cu. in..	(1) Receipts of seedlings purchased; (2) number of live plants	\$7.74/Ea	1
Forage and Biomass Planting (USDA NRCS CPS 512)	Conversion of Annual Cropland to Irrigated Grass/Legume Forage/Biomass Crops OR Conversion of Annual Cropland to Non-Irrigated Grass/Legume Forage/Biomass Crops	Nonnative high seeding rate, no lime	(1) Seeding rate: ≥ 30 lb/acre PLS (pure live seed); (2) Planting method: No-Till/grass drill.	(1) Receipts of seeds purchased; (2) species; (3) good growth	\$313.28/Ac	1
		Nonnative standard seeding rate, no fertilizer	(1) Seeding rate: ≥ 9 lb/acre PLS (pure live seed); (2) Planting method: No-Till/grass drill	(1) Receipts of seeds purchased; (2) species; (3) good growth	\$152.00/Ac	1
		Nonnative standard seeding rate with fertilizer	(1) Seeding rate: ≥ 9 lb/acre PLS (pure live seed); (2) Planting method: No-Till/grass drill	(1) Receipts of seeds purchased; (2) species; (3) good growth	\$218.50/Ac	1
		Non-native high seeding rate with lime or similar amendment	(1) Fields where moisture is not limited; (2) Seeding rate is ≥ 30 lb/acre PLS (pure live seed); (3) No-Till/grass drill is used to seed.	(1) Receipts of seeds purchased (2) species; (3) good growth	\$428.20/Ac	1

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate (\$/Unit)	Years to be paid
Conservation Cover ((USDA NRCS CPS 327)	Convert Irrigated Cropland to Permanent Unfertilized Grass Cover or Grass/Legume Cover OR Convert Non-Irrigated Cropland to Permanent Unfertilized Grass Cover or Grass/Legume Cover	Introduced species	Introduced cool season perennial grass to reduce soil erosion, water/sediment runoff and dust emissions.	(1) Receipts of seeds purchased; (2) species; (3) good growth	\$203.16/Ac	1
		Introduced species with foregone income	Introduced, cool season perennial grass for organically managed lands.	(1) Receipts of seeds purchased; (2) species; (3) good growth; (4) Previous cropland used	\$607.74/Ac	1
		Monarch species - mix	(1) Mix of native grass and forbs for specialized purposes (wildlife, pollinators or ecosystem restoration); (2) Species not readily available and/or difficult to produce.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$2,222.26/Ac	1
		Monarch species - mix with foregone income	A mix of native grass and forbs for specialized purposes; Species not readily available and/or difficult to produce.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$2,465.00/Ac	1
		Native species	Mixture of native and warm season perennial grass to reduce soil erosion, water/sediment runoff and dust emissions.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$280.74/Ac	1
		Native species with foregone income	Mixture of native & warm season perennial grass.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$701.98/Ac	1
		Pollinator species	Permanent vegetation, including a mix of native grasses, legumes, and forbs to provide habitat for pollinators.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$1,571.88/Ac	1
		Pollinator species with foregone income	Permanent vegetation, including a mix of native grasses, legumes, and forbs to provide habitat for pollinators.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$1,993.12/Ac	1

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate (\$/Unit)	Years to be paid
Range Planting (USDA NRCS CPS 550)	Seeding forages to improve rangeland condition	Native species broadcast	(1) Mainly native adapted perennial species (native forb, cool season and native perennial grass); (2) Seeding rate is 18 lb/acre PLS.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$575.56/Ac	1
		Native species high forb drilled	(1) Native adapted perennial species (native forb, cool season and perennial grass); and (2) No-till or range drill.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$526.38/Ac	1
		Native species low forb drilled	(1) Predominately native adapted perennial species (native forb, cool season and native perennial grass); and (2) no-till drill or range drill.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$351.22/Ac	1
		Nonnative species broadcast	(1) Three Species Mix - cool season and introduced perennial grass; (2) Seedbed preparation; and (3) Seeding rate is 18 lb/acre PLS.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$212.90/Ac	1
		Nonnative species drilled	(1) Three Species Mix - cool season and introduced perennial grass; and (2) No-till drill or drill to plant.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	\$169.90/Ac	1
		Shrub plugs	(1) Shrub seedling or transplant, bare root shrubs 3 to 5 feet tall; (2) Planting density: 1000 plants/acre.	(1) Receipts of shrubs purchased; (2) species; (3) good growth.	\$2,578.46/Ac	1
Grassed Waterway (USDA NRCS CPS 412)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Base Waterway	Waterways area measured from top of bank to top of bank. Typical practice is 1200' long, 12' bottom, 8:1 side slopes, and 1.5' depth.	(1) Success of grassed waterway with suitable vegetation; (2) Receipts of materials purchased.	\$2,164.42/Ac	1
	Convert Strips of Non-Irrigated Cropland to Permanent Unfertilized Grass /Legume Cover	Base waterway with checks	Area measured from top of bank to top of bank. Fabric or stone checks installed every 100 feet along the waterway perpendicular to waterflow and 2/3 the waterway top width to reduce maintenance and provide temporary protection until vegetation is established. Fabric Checks are installed 18" deep with 12" laid over on the surface.	(1) Success of grassed waterway with suitable vegetation; (2) Receipts of materials purchased.	\$3,372.00/Ac	1

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate (\$/Unit)	Years to be paid
Prescribed Grazing (USDA NRCS CPS 528)	Grazing Management to Improve Irrigated Pasture Condition OR Rangeland OR Non-Irrigated Pasture Condition	Pasture, basic	Design and implement a grazing system to enhance pasture or rangeland health and ecosystem function; optimize efficiency and economic return through monitoring & record keeping.	(1) Records of grazing dates and stubble height after grazing; (2) short term monitoring- photos and forage production; (3) sensitive area protection.	\$22.06/Ac	1
		Range, basic			\$5.00/Ac	1
Tree/Shrub Establishment (USDA NRCS CPS 612)	Conversion of Annual Cropland OR Grassland to a Farm Woodlot	Conservation, hand planting, browse protection	Planting density ≥ 150 trees/acre. Bare root hardwood seedling or transplant: shrubs 6-18" tall trees 18-36" tall. Seedlings protection.	(1) Receipts of seedlings; (2) species, (3) number of live plants	\$915.3/Ac	1
Compost Application to Annual Crop (CDFA)	Compost (C:N ≤ 11) application to annual crops	Compost from Certified Composting Facility	Application rate must be between 2.2-3.6 Dry tons/Acres	(1) Receipts of total compost purchased from a certified composting facility; (2) conversion factor for compost measured in volume to weight; (3) Compost analysis report including carbon and nitrogen contents and moisture content; (4) Must meet the total dry tonnages in the project; (5) Compost is spread or visible on the ground at verification.	\$50.00/dry ton	3
	Compost (C:N > 11) application to annual crops		Application rate must be between 4.0-5.3 Dry tons/Acres		\$50.00/dry ton	3
Compost Application to Perennials, Orchards and Vineyards (CDFA)	Compost (C:N ≤ 11) application to annual crops	Compost from Certified Composting Facility	Application rate must be between 1.5-2.9 Dry tons/Acres		\$50.00/dry ton	3
	Compost (C:N > 11) application to annual crops		Application rate must be between 4.0-5.3 Dry tons/Acres		\$50.00/dry ton	3
Compost Application to Grassland (CDFA)	Compost (C:N > 11) application to grazed, irrigated pasture	Compost from Certified Composting Facility	Application rate must be between 4.0-5.3 Dry tons/Acres		\$50.00/dry ton	3
	Compost (C:N > 11) application to grazed rangeland		Application rate must be between 4.0-5.3 Dry tons/Acres		\$50.00/dry ton	3
Compost Application to Annual Crop (CDFA)	Compost (C:N ≤ 11) application to annual crops	On-farm produced compost	Application rate must be between 2.2-3.6 Dry tons/Acres	(1) A farm log includes materials, method and temperatures during composting process; (2) Compost analysis report including carbon and nitrogen contents and moisture content; (3) Must meet the total dry tonnages in the project; (4) Compost is spread or visible on the ground at verification.	\$50.00/dry ton	3
	Compost (C:N > 11) application to annual crops		Application rate must be between 4.0-5.3 Dry tons/Acres		\$50.00/dry ton	3
Compost Application to Perennials, Orchards and Vineyards (CDFA)	Compost (C:N ≤ 11) application to annual crops	On-farm produced compost	Application rate must be between 1.5-2.9 Dry tons/Acres		\$50.00/dry ton	3
	Compost (C:N > 11) application to annual crops		Application rate must be between 4.0-5.3 Dry tons/Acres		\$50.00/dry ton	3
Compost Application to Grassland (CDFA)	Compost (C:N > 11) application to grazed, irrigated pasture	On-farm produced compost	Application rate must be between 4.0-5.3 Dry tons/Acres		\$50.00/dry ton	3
	Compost (C:N > 11) application to grazed rangeland		Application rate must be between 4.0-5.3 Dry tons/Acres		\$50.00/dry ton	3

***Legend:**

Practice Implementation Name: This is corresponding to the quantification tool for GHG reduction benefit estimation. Access the quantification tools at: <https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/quantification.htm>.

Scenario Name: This is the corresponding agricultural management practice scenario under which a practice may be funded, as determined by CDFA in collaboration with USDA-NRCS.

Implementation Guidelines: Some agricultural management practices have additional requirements that may not be listed by the USDA-NRCS as a requirement in the Conservation Practice Standard (e.g., compost application rates, minimum widths for establishing some herbaceous and woody practices, or minimum tree densities for woody practices). These requirements ensure alignment with the GHG estimation methods. For more detail, see: <https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials> and <https://efotg.sc.egov.usda.gov/#/details>

Document 4: Soil Sampling Protocol for Soil Organic Matter Analysis

WHAT DO I NEED?

Be sure to bring materials with you when heading to the field for soil sampling.

As shown in the figure on the right, these materials include:

1. Two plastic buckets (one for soil sample and one for supplies).
2. Soil sample bags: one-gallon freezer storage bags (or soil sample bags); one bag per sample.
3. One clipboard and papers for recording.
4. Permanent marker and/or pen.
5. A straight shovel (sharpshooter or drain spade style) OR a soil probe.



WHEN TO TAKE SAMPLES?

Take initial baseline samples before implementing any HSP management practices. Then, take samples near the same time of year for each subsequent sampling event. This will help ensure the most accurate estimates of soil carbon gains over time. Do not take samples immediately after heavy rainfall or irrigation events, or after applications of manure or compost, etc.

WHERE TO SAMPLE?

It is up to each producer to determine the size of the land area they would like to monitor. To the producer's best knowledge, all soil samples should come from the same uniform soil, as well as uniform management history and yields as determined by the producer.

Example: Mark an area of size 30 by 30 feet in the field as your sampling unit. Take composite soil samples from 9-10 locations. Sampling locations may be selected by:

- Walking in a zig-zag pattern; or,
- Divide the field into 9 grids of 10 feet by 10 feet each and collect one sample from each grid.

Additionally, if sampling from a row-cropping or orchard system, consider which area(s) are of most interest (i.e. row vs. inter-row areas).

Do NOT to take samples from feedlots, compost piles, fences, roads, depressions, areas with high salinity or consistently high moisture content.

HOW TO TAKE A SOIL SAMPLE?

1. Expose the bare mineral soil by removing live vegetation, litter, duff or crop residue. If the site is covered with vegetation, trim it close to the soil surface (A)
2. Use the shovel to dig a small hole to 8" deep. From the side of the hole, take a vertical rectangular slice of soil 8" deep and about 2" thick (B).
3. Remove any extra soil to ensure that the sample is the **same width** at the top and bottom of the slice so that it is not biased with more soil from the surface compared to the subsurface (C)
4. Place sample into clean bucket.
5. Go to the next location and repeat the steps 1-4.
6. Finish all 9 sampling locations.
7. Gently mix soils in the bucket and collect 6 cups of well-mixed soils (or no less than 1 lb.) in the sample bag labeled with the APN, sampling date, and farm name (D).



SEND SOIL SAMPLES TO A SOIL TESTING LABORATORY

Before you send your soil samples for analysis, ensure that the laboratory uses University of California test methods which are proven on California farms by the University. Contact the soil analytical laboratory that you need testing results on soil organic matter content.

CDFA recommends the laboratories at the following websites for tests conducted for the 2017 Healthy Soils Program:

- Selected Plant and Soil Laboratories in Northern and Central California
<http://cesonoma.ucanr.edu/files/27431.pdf>.
- UC Cooperative Extension el Dorado County List of Laboratories for Tissue/Soil/Water
 - Agricultural Analysis <http://cecentralsierra.ucanr.org/files/115331.pdf>.
- UC ANR Soils Testing Laboratories for Home Gardeners <http://ccmg.ucanr.edu/files/51308.pdf>.

If you know your soils are **calcareous soils** (soils with a significant amount of calcium carbonate), please make sure that the laboratory you are using to test your soil samples are aware of your soil type and able to accommodate for the analysis.

Document 5: Non-Overlapping Practices

Practices in the same group cannot be implemented on the exact same land area or field, i.e., cannot overlap:

Group I:

- Cover Crop ([USDA NRCS CPS 340](#))
- Conservation Crop Rotation ([USDA NRCS CPS 328](#))
- Strip Cropping ([USDA NRCS CPS 585](#))

Group II:

- Residue and Tillage Management – No-Till ([USDA NRCS CPS 329](#))
- Residue and Tillage Management – Reduced Till ([USDA NRCS CPS 345](#))

Group III:

Compost Application: Compost is either

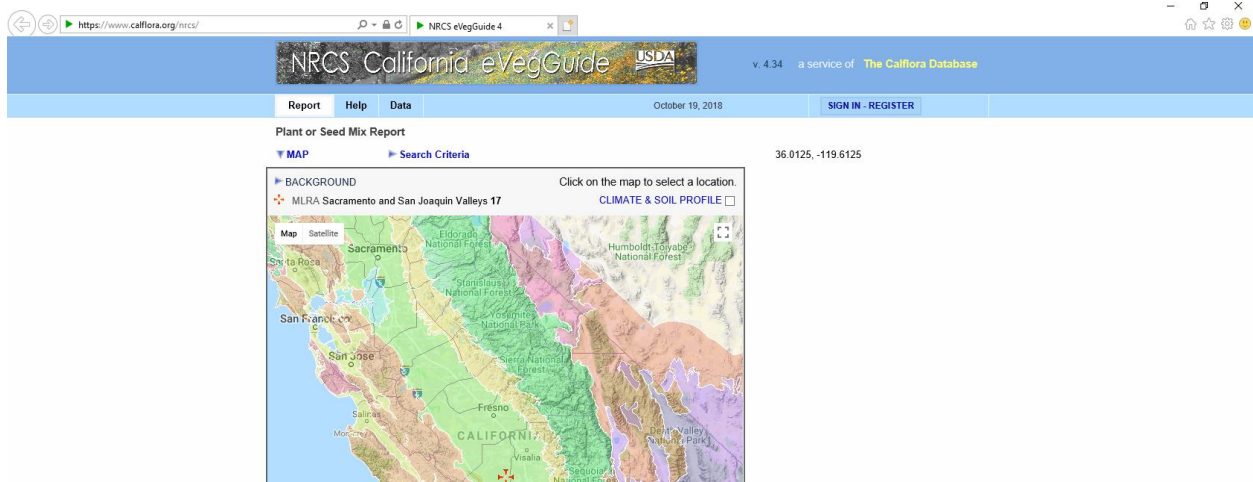
- Purchased from a Certified Facility
- On-farm Produced Compost

Group IV:

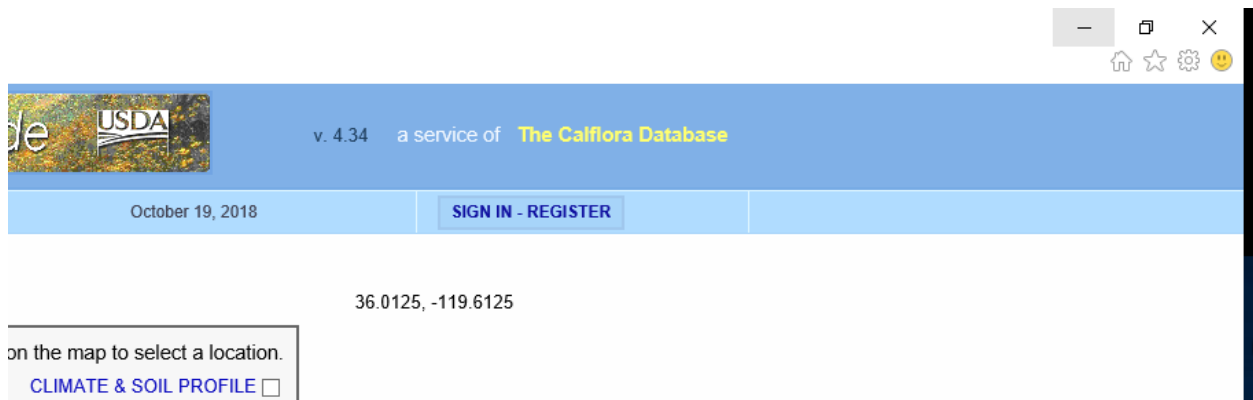
- Alley Cropping ([USDA NRCS CPS 311](#))
- Multi-story Cropping ([USDA NRCS CPS 379](#))

Document 6: Step-by-Step Instructions to Assist in Selecting Species to Be Planted When Implementing Cover Crop, Herbaceous, and Woody Cover Establishment Practices (calflora NRCS)

Step 1: Go to the USDA NRCS California eVegGuide website at <https://www.calflora.org/nrcs/> as shown below.



Step 2: Click on the “SIGN IN – REGISTER” link (upper right corner) to create user account.

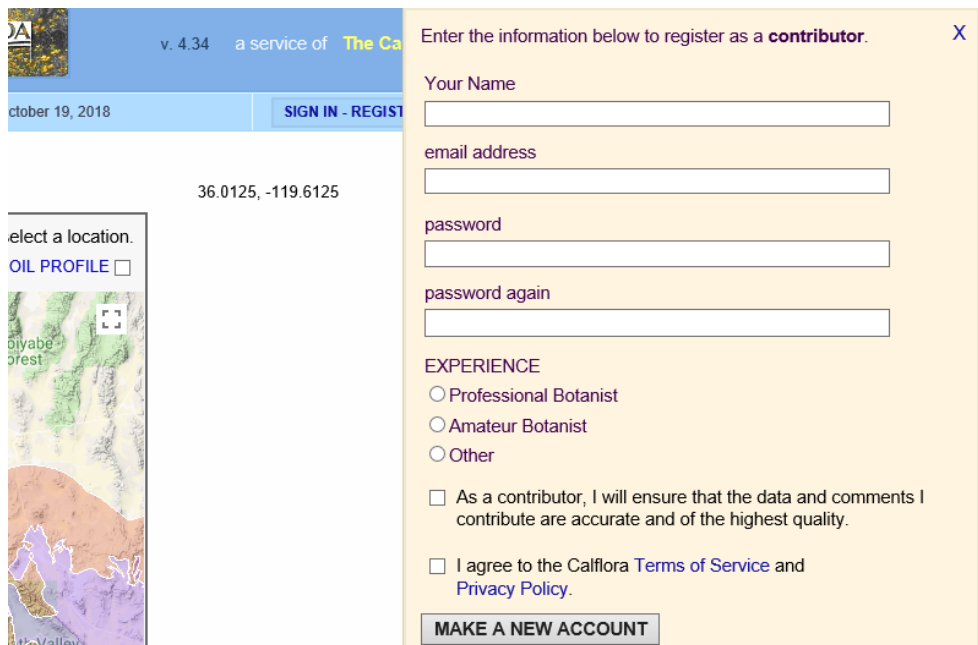


Step 3: Select “MAKE A NEW ACCOUNT” link shown below.



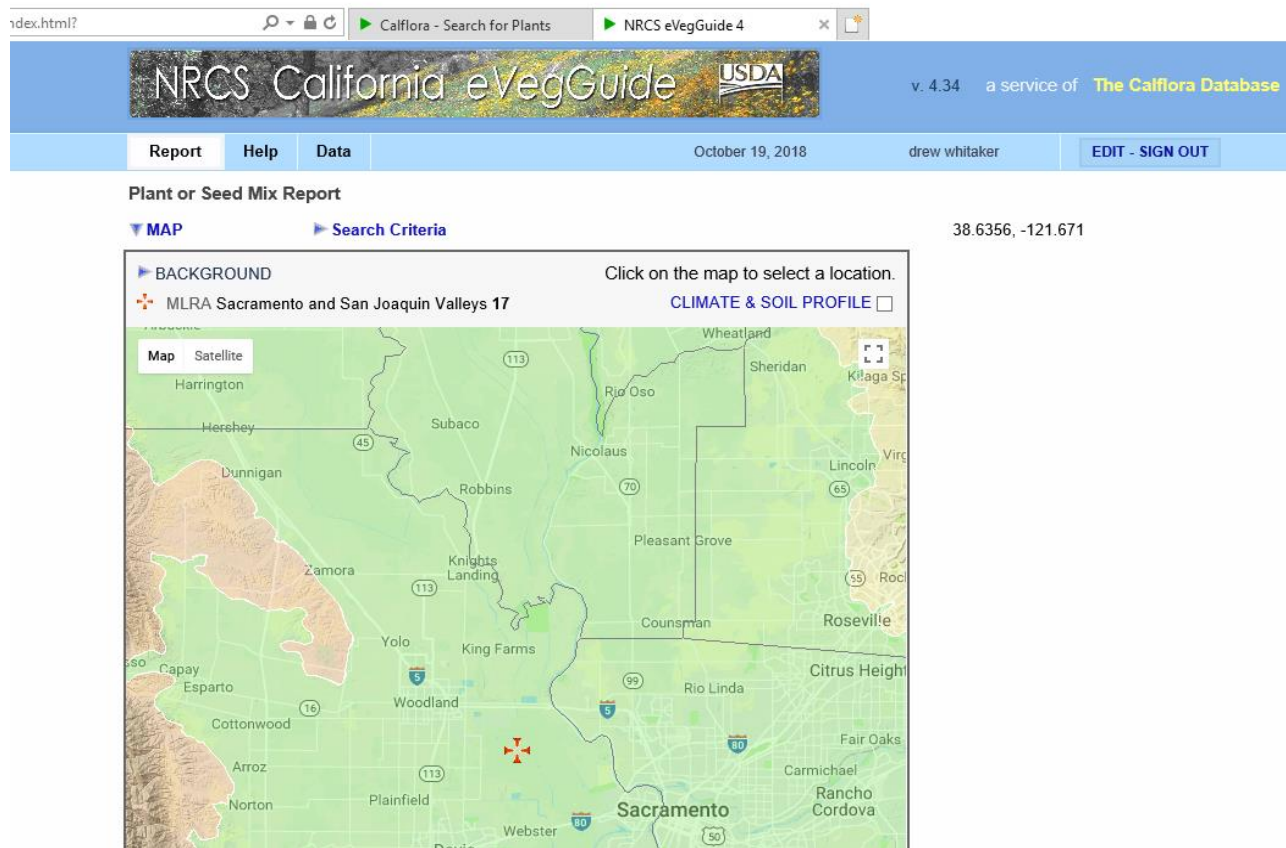
A screenshot of a web browser window showing a modal dialog for user authentication. The modal is titled "v. 4.34 a service of The California Native Plant Society" and has a close button (X) in the top right corner. It contains two input fields: "email address:" and "password:". Below these fields are three buttons: "SIGN IN", "MAKE A NEW ACCOUNT", and "FORGOT MY PASSWORD". The background of the browser window shows a map of California with a location marker at 36.0125, -119.6125 and a "SIGN IN - REGISTER" button.

Step 4: Fill out information boxes to create user profile account.

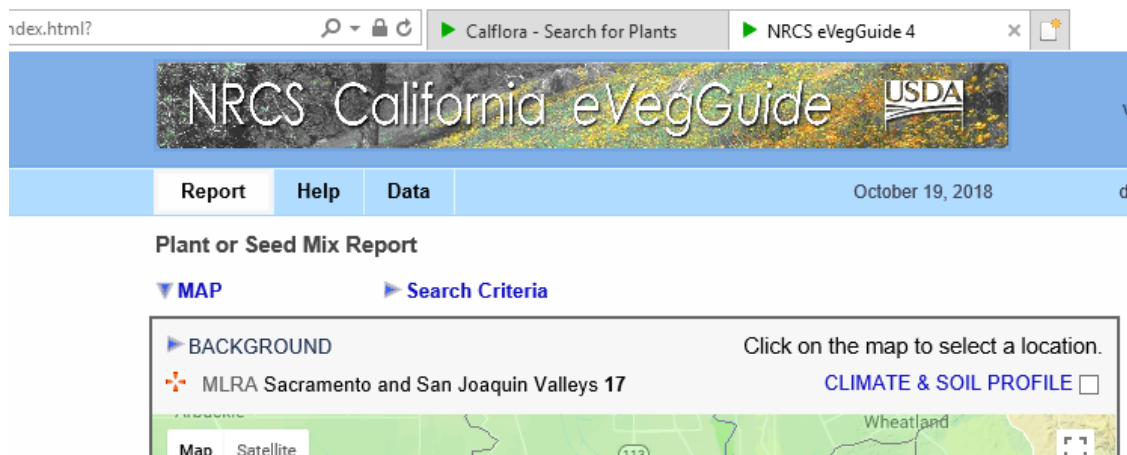


A screenshot of a web browser window showing a modal dialog for user registration. The modal is titled "Enter the information below to register as a contributor." and has a close button (X) in the top right corner. It contains several input fields: "Your Name", "email address", "password", and "password again". Below these fields is a section titled "EXPERIENCE" with three radio button options: "Professional Botanist", "Amateur Botanist", and "Other". There are also two checkboxes: "As a contributor, I will ensure that the data and comments I contribute are accurate and of the highest quality." and "I agree to the Calflora Terms of Service and Privacy Policy.". At the bottom is a "MAKE A NEW ACCOUNT" button. The background of the browser window shows a map of California with a location marker at 36.0125, -119.6125 and a "SIGN IN - REGISTER" button.

Step 5: Use mouse cursor to select location (location agricultural practice is to be implemented) on the map. **Note:** area selected on map is denoted by red cross.



Step 6: Select “Search Criteria” link.



Step 7: Choose appropriate agronomic “Practice” to be implemented. **Note:** Cover crop was selected for this example.

The screenshot shows the NRCS California eVegGuide web application interface. The header includes the title "NRCS California eVegGuide" with the USDA logo, version "v. 4.34", and "a service of The Calflora Database". The navigation bar has tabs for "Report", "Help", and "Data". The user is logged in as "drew whitaker" on "October 19, 2018", with an "EDIT - SIGN OUT" link. The main section is titled "Plant or Seed Mix Report" and includes a "MAP" link and "Search Criteria" for coordinates "38.6356, -121.671". The search criteria form has two dropdown menus: "Practice" set to "340 - Cover Crop" and "Purpose" set to "any". Below these are checkboxes for "Plant Type" (Cereal Grain, Forb, Legume, Grass or Grass-like, Shrub, Tree) and "Pollinator Habitat" (Native). The "Legume" checkbox is selected. There are "CLEAR" and "SEARCH" buttons at the bottom right of the form. At the bottom of the page, there are links for "Select plants" and "Select a mix".

Step 8: Choose “Purpose” dropdown box and “Plant Type” check box. **Note:** for this example, Nitrogen fixation, Legume, and Pollinator Habitat were selected. Select “Search” to bring up a tabulated list of legume cover crops to be used for Nitrogen fixation and Pollinator Habitat based on your location.

This screenshot shows the same NRCS California eVegGuide web application interface, but with updated search criteria. The "Practice" dropdown remains "340 - Cover Crop". The "Purpose" dropdown is now set to "3 - Nitrogen Fixation". In the "Plant Type" section, the "Legume" checkbox is now checked. The "Pollinator Habitat" section now has a checked box under "Native". The "CLEAR" and "SEARCH" buttons are still present. The user is still logged in as "drew whitaker", but the date is now "October 22, 2018". The coordinates have changed to "38.6561, -121.6544". At the bottom right, a new link "Plant Practice Search" has appeared. The "Select plants" and "Select a mix" links remain at the bottom left.

Step 9: The tabulated list provides information (Common Name, Scientific Name, Growth Cycle, Plant Type, Planting Rate, etc.) for individual cover crops that can be used based on your location for Nitrogen Fixation and Pollinator Habitat.

ubpractice=38&p.plant_type=Legume comet-planner-cdfahsp.com NRCS eVegGuide 4

NRCS California eVegGuide USDA v. 4.34 a service of The California Database

Report Help Data October 22, 2018 drew whitaker EDIT - SIGN OUT

Plant or Seed Mix Report

MAP Search Criteria 38.6561, -121.6544

Practice 340 - Cover Crop Purpose 3 - Nitrogen Fixation

Plant Type ☐ Cereal Grain ☐ Forb ☒ Legume ☐ Grass or Grass-like ☐ Shrub ☐ Tree Pollinator Habitat ☒ Native ☐

CLEAR SEARCH

Select plants Select a mix Plant Practice Search

To include a plant in the final report, click on Percent, and specify a percentage. LBS: PLS pounds / acre at 100%

15 results Click on [Scientific Name](#) for more information.

Percent	Common Name	Scientific Name	Resident Status	Growth Cycle	Plant Type	Bloom	Drilled LBS	Broadcast LBS	Spacing feet	Ease Rating	Notes
0 %	Sunn hemp	Crotalaria juncea	introduced	Annual	Legume		40	80		easy	34 33 36 30
0 %	Small-flowered lupine	Lupinus bicolor	native	Annual	Legume	Mar-Jun	14.5	29		easy	29 35 37 2 31
0 %	Annual yellow sweetclover	Melilotus indicus	introduced	Annual	Legume	May-Aug	10	20		easy	29 11 33 37 36 13 31
0 %	Annual white sweetclover	Melilotus officinalis	introduced	Annual	Legume	May-Sep	10	20	4	easy	29 12 33 37 36 13 31

Step 10: In the tabulated list, select the legumes that will be used in the cover crop practice. For this example, 50% of the cover crop will be “Sunn Hemp” and 50% will be “Small-flowered lupin”. Select “FINAL REPORT” to calculate the appropriate planting/seeding rate based off the 50/50 mixture ratio.

subpractice=38&p.plant_type=Legume comet-planner-cdfahsp.com NRCS eVegGuide 4

NRCS California eVegGuide USDA v. 4.34 a service of The California Database

Report Help Data October 22, 2018 drew whitaker EDIT - SIGN OUT

Plant or Seed Mix Report

MAP Search Criteria 38.6561, -121.6544

Practice 340 - Cover Crop Purpose 3 - Nitrogen Fixation

Plant Type ☐ Cereal Grain ☐ Forb ☒ Legume ☐ Grass or Grass-like ☐ Shrub ☐ Tree Pollinator Habitat ☒ Native ☐

CLEAR SEARCH

Select plants Select a mix Plant Practice Search FINAL REPORT

To include a plant in the final report, click on Percent, and specify a percentage. LBS: PLS pounds / acre at 100%

15 results Click on [Scientific Name](#) for more information.

Percent	Common Name	Scientific Name	Resident Status	Growth Cycle	Plant Type	Bloom	Drilled LBS	Broadcast LBS	Spacing feet	Ease Rating	Notes
50 %	Sunn hemp	Crotalaria juncea	introduced	Annual	Legume		40	80		easy	34 33 36 30
50 %	Small-flowered lupine	Lupinus bicolor	native	Annual	Legume	Mar-Jun	14.5	29		easy	29 35 37 2 31

Step 11: Approved pre-mixed bags of seed may also be used by selecting “Select a mix” and then choosing the pre-mixed seed.

[Select plants](#)
[Select a mix](#)
[Plant Practice Search](#)
[FINAL REPORT](#)

15 results To select a seed mix for the final report, check the checkbox.
Click on the **NAME** link to see components.

Select	ID	Name	Description	Resident	Ease Rating
<input checked="" type="checkbox"/>	1833	Reseeding Annual Clover Mix for Orchards	Seeding rate: drilled - 25 lb/ac, broadcast - 45 lb/ac	introduced	easy
<input type="checkbox"/>	20	Napa Vineyards: Hillside Quick Erosion Control Soil Builder Mix (formerly NAPA2 mixture).	Seeding rate: drilled - 90 lb/ac, broadcast - 158 lb/ac	introduced	easy
<input type="checkbox"/>	1662	Cover Crop, SoilMax Legume Mix	Applicable to: all Area 2 MLRA's and 4ETa zones. Seeding rate: drilled - 135 lb/ac, broadcast - 235 lb/ac	both	easy
<input type="checkbox"/>	1665	Cover Crop, Bee Forage Mixture 2	Applicable to: all Area 2 MLRA's and 4ETa zones. Seeding rate: drilled - 18 lb/ac, broadcast - 32 lb/ac	introduced	easy

Step 12: Select “FINAL REPORT” to calculate the appropriate planting/seeding rate of the pre-mixed seed.

[MAP](#)
[Search Criteria](#)
38.6356, -121.671

Practice
 340 - Cover Crop

Purpose
 3 - Nitrogen Fixation

Plant Type
☐ Cereal Grain ☐ Forb ☒ Legume ☐ Grass or Grass-like ☐ Shrub ☐ Tree

Pollinator Habitat ☐ **Native** ☐

[CLEAR](#) [SEARCH](#)

[Select plants](#)
[Select a mix](#)
[Plant Practice Search](#)

[Final Report](#)
[GENERATE CSV DOCUMENT](#)
[GENERATE RTF DOCUMENT](#)

3 results Click on [Scientific Name](#) for more information. LBS: PLS pounds / acre

Percent	Common Name	Scientific Name	Resident Status	Growth Cycle	Plant Type	Bloom	Drilled LBS	Broadcast LBS	Spacing feet	Ease Rating	Notes
40.0 %	Subterranean clover	Trifolium subterraneum	introduced	Annual	Legume	Jan-Feb	10.0	20.0		easy	26 37 33 36 31 40
30.0 %	Rose clover	Trifolium hirtum	introduced	Annual	Legume	Feb-Mar	2.0	4.0		easy	3 26 37 33 31 40
30.0 %	Crimson clover	Trifolium incarnatum	introduced	Annual	Legume	Feb-Apr	2.2	4.4		easy	26 37 33 31
Total							14.2	28.4			

Note: more information about the USDA NRCS California eVegGuide website is available under the “Help” tab.

The screenshot shows a web browser window with the address bar displaying "comet-planner-cdfahsp.com" and a tab titled "NRCS eVegGuide 4". The website header features the "NRCS California eVegGuide" logo with the USDA emblem, version "v. 4.34", and the text "a service of The Calflora Database". A navigation bar includes tabs for "Report", "Help", and "Data". The main content area, under the "Help" tab, contains the following text:

The NRCS **eVegGuide** (electronic Vegetative Guide) is a tool for finding plants and seeds for NRCS land conservation practices. An eVegGuide report shows recommended plants, seeds, and planting recommendations to implement a particular practice at a chosen location.

The **eVegGuide** is a sub-section of the California eFOTG (electronic Field Office Technical Guide). It contains the most recent information from the Lockeford Plant Materials Center and the USDA Plants database. Further information and documentation is available from the [eFOTG web page](#).

Please [contact us](#) if you need immediate help using the **eVegGuide**.

NRCS California eVegGuide Help Resources

- [How to use the NRCS California eVegGuide](#) -- a video tutorial (updated March, 2018)
- [Plant Count by Practice for each MLRA](#) -- how many plants are available for each practice and purpose

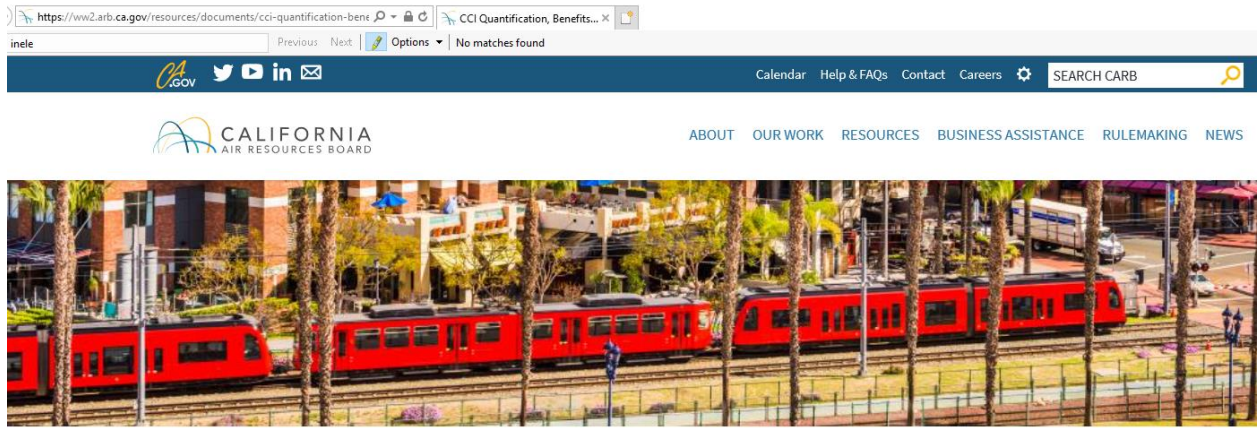
Document 7: 2018 HSP Incentives Program Scoring Criteria

CRITERIA	MAX POINTS
1. PROJECT FEASIBILITY	
1.1 PROJECT LOGISTICS (SECTION II) <ul style="list-style-type: none"> Proposed practice not implemented in the field currently or last year? For practice expanding to new acres: only new acres are eligible for funding? Proposed practice implementation methods must be consistent with the requirements in the corresponding NRCS CPS documentation and/or with the requirements in the CDFA Compost Application White Paper. 	
1.2 PROJECT DESIGN (SECTION III) <ul style="list-style-type: none"> Project design schematic (map) including proposed practices is provided, accessible and readable. The schematic includes all fields/APNs and landmarks. All HSP practices to be implemented are identifiable on the map. The total acreage or length for each practice to be implemented is provided. Plant species in the project if applicable (e.g., for Cover Crop) is provided. Compost Application: C:N ratio and application rate are indicated and within eligible range. 	40
1.3 PROJECT WORK PLAN (SECTION IV) <ul style="list-style-type: none"> Tasks necessary to accomplish implementation of each proposed practice are feasible and all necessary tasks for each of the Project Year are included. Timeline for completing all tasks is reasonable and achievable. Please check: <ul style="list-style-type: none"> All practices must be implemented/maintained each year for three years. Soil samples must be taken prior to, one, two and three years after practice implementation. 	
1.4 PROJECT BUDGET (SECTION V) <ul style="list-style-type: none"> Only HSP payment rates are allowed. Acres/feet in the budget is only for new practice(s) and/or new acres of existing practice(s). For a same practice in the same field if different materials/plant species are to be used, acreage/feet in the budget worksheet can be entered only once. 	
2. PROJECT SUSTAINABILITY (SECTION VI) <ul style="list-style-type: none"> Applicant explained why this project is important to the agricultural operation. Is this project a good fit to this agricultural operation? Is this project likely to be successful and are the anticipated changes after project implementation explained sufficiently? Did the project adequately describe plans for future adoption, e.g. continuing the practice(s) or expand the practice(s) to new APNs beyond the project-term? 	20

<ul style="list-style-type: none"> Does the project include multiple practices? 	
3. GHG EMISSION REDUCTIONS (SECTION VII) <ul style="list-style-type: none"> GHG Reductions Estimation Report from COMET-Planner is provided. Input data (county, practice and acreage) is consistent with what is provided in the project design. Acreage to calculate GHG reductions is only for each new practice or new acreage of expanded existing practice(s). For cover crop practice implementation where legume and non-legume species are to be used in the same field, only acreage for legume species should be entered. 	20
4. SOIL HEALTH AND ENVIRONMENTAL COBENEFITS (SECTION VIII) <ul style="list-style-type: none"> Have environmental and soil health benefits been adequately described? Will the proposed project achieve the benefits claimed? 	10
5. CONSERVATION PLAN (SECTION IX) <ul style="list-style-type: none"> Documents: meet minimum requirements for the conservation plan. 	10
TOTAL POINTS	100







Document 8: Step-by-step Instructions for Compost Ineligible Tool

Step 1: Go to the California Air Resources Board’s QM and calculator tools website at <https://ww2.arb.ca.gov/resources/documents/cqi-quantification-benefits-and-reporting-materials>.

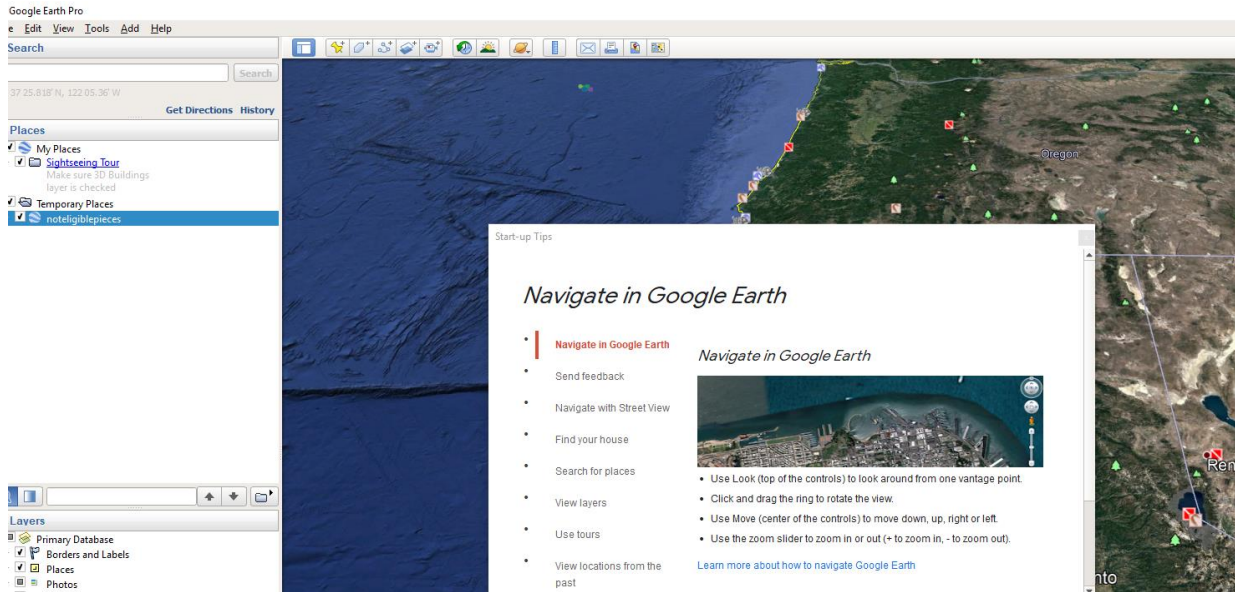


CCI Quantification, Benefits, and Reporting Materials

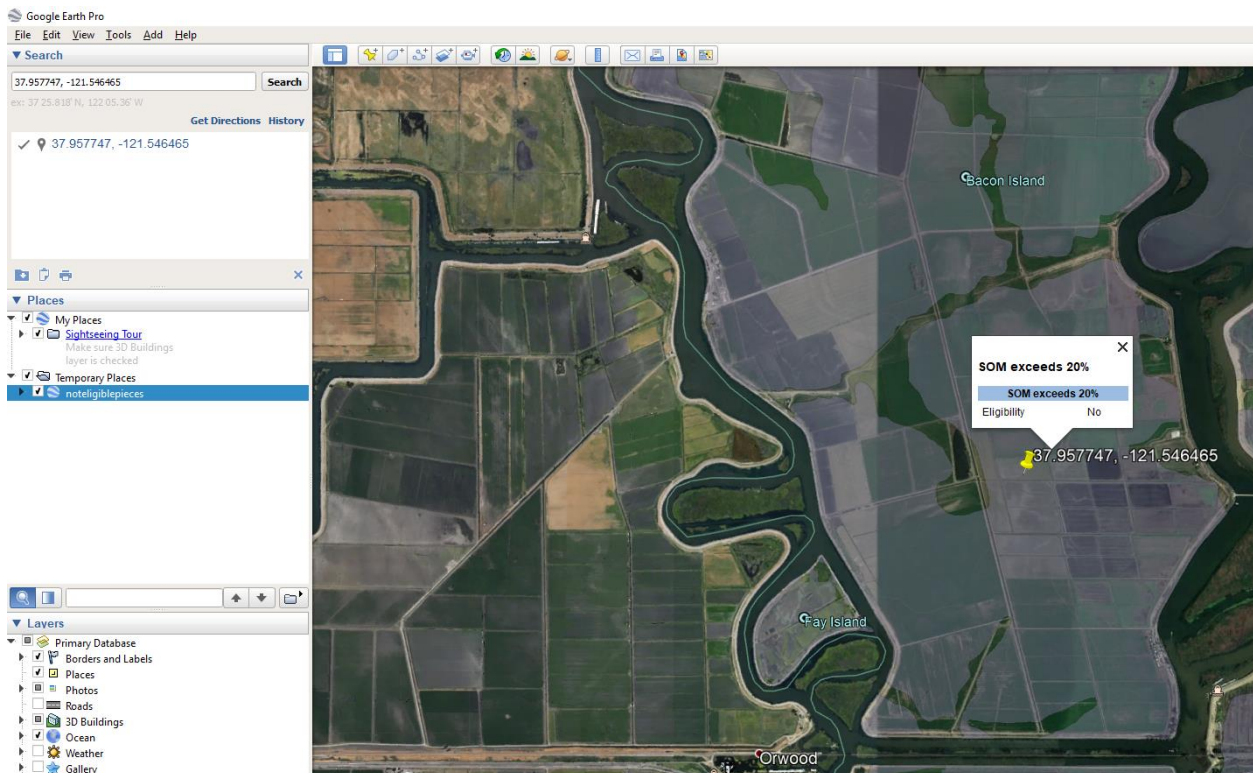
Step 2: Scroll down to the **Natural Resources and Waste Diversion** section to select the *Compost Ineligible Tool (Google Earth KMZ file)*. **Note:** If it asks you to open or save the file, select “open”. To download and install Google Earth, visit <https://www.google.com/earth/>

					Calendar	Help & FAQs	Contact	Careers	SEARCH CARB
	ABOUT OUR WORK RESOURCES BUSINESS ASSISTANCE RULEMAKING NEW								
CEC	Agricultural Renewable Energy	Under Development	Energy Efficiency and Renewable Energy	Under Development	Natural Resources and Waste Diversion				
Agency	Project Type	Quantification Methodology (QM) and Calculator Tool	Priority Population Benefit Criteria Table	Reporting Template					
CDFA	Healthy Soils	Healthy Soils QM Compost Ineligible Tool (Google Earth KMZ file)	Healthy Soils	Healthy Soils					

Step 3: Close the “Navigate in Google Earth” tutorial box.



Step 4: In the Search bar, enter the site location (address or latitude and longitude coordinates) for potential compost application to determine eligibility. Clicking on yellow thumbtack will produce a pop-up sign that states Soil Organic Matter exceeds 20%. Not eligible.



Note: if soil is eligible for compost application, no pop-up sign will appear (shown below).

